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OFFICIAL PUBLICATION OF THE PROCEEDINGS, AMERICAN ASSOCIATION OF TEXTILE CHEMISTS AND COLORISTS

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Telephone SPring 7-9364

AMERICAN DYESTUFF REPORTER

DEVOTED TO TEXTILE WET-PROCESSING

AATCC CONVENTION ISSUE

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VOLUME 46 NOVEMBER 4, 1957 NUMBER 22

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AMERICAN

DYESTUFF REPORTER

Volume 46 November 4, 1957 Number 22

REPORTER REACHES FORTIETH BIRTHDAY

THE AMERICAN DYESTUFF REPORTER became forty years old this past October 8th, the first issue having appeared on October 8, 1917. Coincidentally, as the REPORTER was started to foster the infant American dyestuff industry, that industry is also forty years old.

The REPORTER was the outgrowth of a department in the now defunct *Dry Goods Guide*, which was started in 1916 as part of an educational campaign directed to retailers to explain to them the dyestuff situation as it then existed in this country. At that time A P Howes was editorial director and advertising manager of *Dry Goods Guide* and Myron D Reeser was advertising representative.

The first appearance of a dyestuff advertisement in the *Guide* was in July, 1916 and the advertiser was Marden, Orth & Hastings Co, a large general jobbing house which handled dyestuffs along with other merchandise. In August the dyestuff department first appeared and the initial article was entitled "The Dye Situation" and was prepared by H Gardner McKerrow, then employed by Marden and later advertising manager of National Aniline & Chemical Co. This article was the first appeal for tariff protection to appear. In this issue were advertisements from A Klipstein & Company and Logwood Products Corporation. Other early advertisers in the department were Ernest Zobel Company, John Campbell & Co, Williamsburg Chemical Company, National Aniline & Chemical Co, Dicks, David & Broadfoot and New York Color & Chemical Company.

Interest continued and grew in the dyestuff department and it was decided that the infant dyestuff industry could be better served by a separate publication circulated throughout the entire textile field at frequent intervals. Accordingly the first issue, published by the Hewitt Publishing Corporation, publishers of the *Guide*, appeared on Monday, October 8, 1917. It was a 16 page newspaper, 6 x 9 inches in size, to be published weekly. The leading article indicated clearly the purpose of the new publication as evidenced by the following quotation:

"This is the initial number of the AMERICAN DYESTUFF REPORTER. Hereafter it will come weekly to your desk. It is published in the interests of consumers of dyestuffs, colors and allied chemicals. It aims to establish a closer association—a better understanding—among all elements in this newest of American industries. Its mission is worthy—with your help it can succeed.

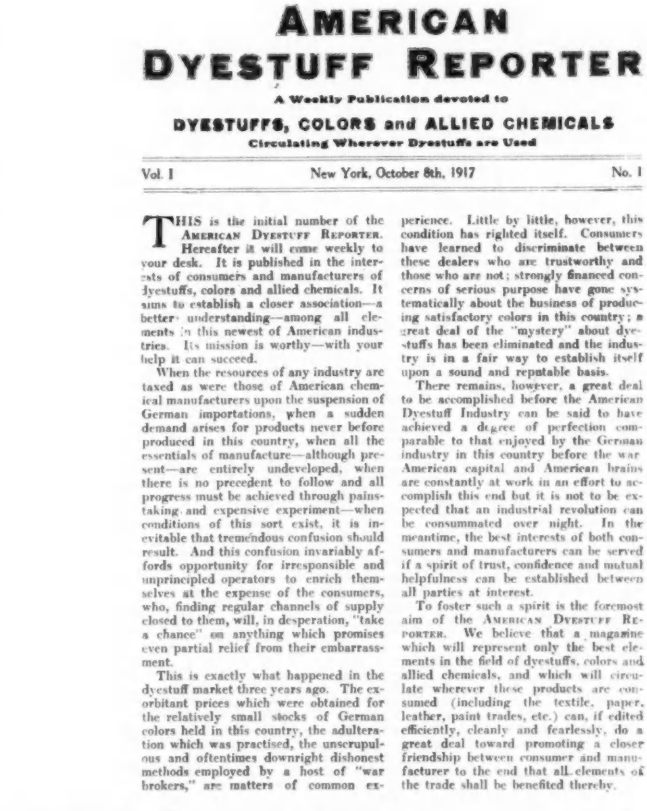
"To accomplish this end we have set, for the AMERICAN DYESTUFF REPORTER, the following rules of conduct:

"1. To print only information which is in every respect reliable.

"2. To avoid misrepresentation and exaggeration in every form.

"3. To avoid recommending or endorsing in our editorial columns the goods of any particular manufacturer.

"4. To avoid advertising individuals



AMERICAN DYESTUFF REPORTER

A Weekly Publication devoted to

DYESTUFFS, COLORS and ALLIED CHEMICALS

Circulating Wherever Dyestuffs are Used

Vol. I New York, October 8th, 1917 No. 1

THIS is the initial number of the AMERICAN DYESTUFF REPORTER. Hereafter it will come weekly to your desk. It is published in the interests of consumers and manufacturers of dyestuffs, colors and allied chemicals. It aims to establish a closer association—a better understanding—among all elements in this newest of American industries. Its mission is worthy—with your help it can succeed.

When the resources of any industry are taxed as were those of American chemical manufacturers upon the suspension of German importations, when a sudden demand arises for products never before produced in this country, when all the essentials of manufacture—although present—are entirely undeveloped, when there is no precedent to follow and all progress must be achieved through painstaking and expensive experiment—when conditions of this sort exist, it is inevitable that tremendous confusion should result. And this confusion invariably affords opportunity for irresponsible and unprincipled operators to enrich themselves at the expense of the consumers, who, finding regular channels of supply closed to them, will, in desperation, "take a chance" on anything which promises even partial relief from their embarrassment.

This is exactly what happened in the dyestuff market three years ago. The exorbitant prices which were obtained for the relatively small stocks of German colors held in this country, the adulteration which was practised, the unscrupulous and oftentimes downright dishonest methods employed by a host of "war brokers," are matters of common experience. Little by little, however, this condition has righted itself. Consumers have learned to discriminate between these dealers who are trustworthy and those who are not; strongly financed concerns of serious purpose have gone systematically about the business of producing satisfactory colors in this country; a great deal of the "mystery" about dyestuffs has been eliminated and the industry is in a fair way to establish itself upon a sound and reputable basis.

There remains, however, a great deal to be accomplished before the American Dyestuff Industry can be said to have achieved a degree of perfection comparable to that enjoyed by the German industry in this country before the war. American capital and American brains are constantly at work in an effort to accomplish this end but it is not to be expected that an industrial revolution can be consummated over night. In the meantime, the best interests of both consumers and manufacturers can be served if a spirit of trust, confidence and mutual helpfulness can be established between all parties at interest.

To foster such a spirit is the foremost aim of the AMERICAN DYESTUFF REPORTER. We believe that a magazine which will represent only the best elements in the field of dyestuffs, colors and allied chemicals, and which will circulate wherever these products are consumed (including the textile, paper, leather, paint trades, etc.) can, if edited efficiently, cleanly and fearlessly, do a great deal toward promoting a closer friendship between consumer and manufacturer to the end that all elements of the trade shall be benefited thereby.

Front page of the first issue of the REPORTER, a sixteen page, 6" x 9" newspaper with self cover.

or firms under the guise of special articles.

"5. To expose and combat all questionable practices in the trade and those who practice them.

"To those consumers who read this first issue of the REPORTER let us say that it is in the strictest sense your magazine. It is published for the consumer and, in so far as we can make it so, shall be directed by the consumer. Let us know what you need in a trade paper and we will endeavor to fill your wants."

Shown on the masthead of this issue were: Dexter W Hewitt, President; A P Howes, Vice President; Elisha Hewitt, Secretary and Treasurer; and Myron Drew Reeser, Managing Editor. Both of the Hewitts and Mr Howes have since passed away. Mr Reeser is now Business Manager of the publication and Vice President of the Howes Publishing Company.

The REPORTER devoted itself to development of sentiment among dyestuff consumers favorable to government protection either by tariff legislation or definite embargo against foreign competition to enable the domestic dyestuff industry to survive. This campaign continued until Congress acted favorably.

The acquisition of the REPORTER by the Howes Publishing Company is best told in Mr Howes' words, as published in our December 2, 1946 issue:

"By late spring of 1918 it had become apparent that the AMERICAN DYESTUFF REPORTER was steadily gaining in consumer interest and advertising support and it seemed probable that the magazine would become profitable from a publication standpoint in the not distant future. Coincidentally, the affairs of Hewitt Publishing Corporation, because of the unfortunate purchase of an additional property on the basis of serial notes to be met in the future, were in a pretty bad way, leading me to believe that the corporation was headed for bankruptcy—a condition which subsequently ensued.

"Accordingly, I approached the Hewitts with a suggestion that they should give me a bill of sale of AMERICAN DYESTUFF REPORTER in return for the surrender to them of stock and notes of the Hewitt Publishing Corporation which I held. After some protest on their part, this arrangement was consummated and on July 1, 1918, the Howes Publishing Company, newly formed, took over ownership and direction of the REPORTER.

"By some coincidence, the first issue produced under the new management, that of July 1, 1918, also marked the first appearance of the DuPont Company as a regular advertiser. The page appearing therein bears the familiar DuPont oval and the first announcement of the production of synthetic indigo."

AMERICAN
DYESTUFF REPORTER
Vol. VIII No. 7
Aug. 12, 1918
IN THIS ISSUE
The Use of German Formulas and Patents
Dyeing Miscellaneous Fibres By Josef Loebl
Publicity and the Dyestuff Industry
An American Nomenclature for American Dyes

First issue of the REPORTER to appear with a cover. Size: 6" x 9"

Other advertisers who soon began to use space included the Newport Chemical Works, Dunker & Perkins Co, Jennings & Co, S R David & Co, F E Atteaux & Co and United States Color & Chemical, all of these in New England with the exception of Newport.

By 1920 it became apparent that the original purpose of the REPORTER, to function as a propaganda sheet for the dyestuff industry, was no longer valid—what was now needed was technical information having to do with the application of colors and allied chemical problems. Accordingly, it was decided to publish monthly technical supplements to the weekly news edition. The first issue appeared on August, 1920, with Dr Louis A Olney as Advisory Editor. Dr Olney continued as Directing Editor in later years until his death in 1949.

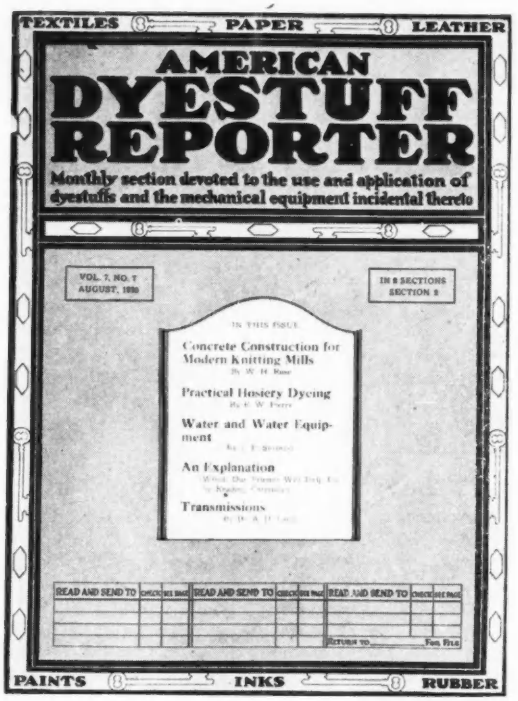
The Technical Supplement was published as a 9 x 12 magazine, with coated stock, suitable for halftones.

In the September, 1920, issue there appeared an article by Dr Olney entitled "Standard Dye Tests and Standard Records—A Plea" which pointed out the necessity for such. Although it did not call for the formation of an Association to carry out the plan, it was the forerunner of other articles which eventually led to the organization of the AATCC. The first direct appeal appeared in the June, 1921 issue of the Technical Supplement in an editorial by A P Howes entitled "Wanted: A Technical Association of the American Textile Industry." Portions of this read as follows:

"The benefits to be derived from a technical association of the textile industry are obvious. It would make possible the freer exchange of ideas and could provide for the dissemination of knowledge useful to all. It might reasonably be expected to develop better acquaintanceship and morale among technical men, to stimulate the spirit of research, and to emphasize right educational methods in the industry—all of which are results worth going after.

* * *

"Very important, likewise, it would greatly facilitate the establishment of standards, particularly standard methods of dye testing. The need for the latter has been repeatedly em-


TEXTILES PAPER LEATHER

AMERICAN DYESTUFF REPORTER

Monthly section devoted to the use and application of dyestuffs and the mechanical equipment incidental thereto

VOL. 7, NO. 7 AUGUST, 1950

IN 8 SECTIONS SECTION 2

IN THIS ISSUE

Concrete Construction for Modern Knitting Mills

Practical Hosiery Dyeing

Water and Water Equipment

An Explanation

Transmissions

READ AND SEND TO | READ AND SEND TO | READ AND SEND TO

PAINTS INKS RUBBER

First issue of the Monthly Technical Section of the REPORTER in 9" x 12" size issued as a supplement to the small weekly newspaper.

phasized by the REPORTER and our remarks on this subject have received endorsement from many leaders in dyestuff and textile circles. It is a need universally recognized throughout the industry, and the sole reason why it remains unfilled today is because of the lack of machinery for concerted action. Standard methods for textile testing and analysis should also be legitimate fields of endeavor for such an organization.

"The REPORTER believes that the time is ripe for the organization of a technical association of the textile industry, and that the industry would gain immeasurably by the presence of such a body within its ranks. We shall be glad to learn the views of readers on this important subject, to give publicity to any suggestions which would be of interest along this line, and shall account it an honor if we can be of service in aiding those desirous of bringing about the creation of such a body."

Marked copies of this issue of the REPORTER were mailed to various individuals in the field and comments were requested. The response was unanimously enthusiastic in favor of the plan. The editorial campaign continued in the following year and culminated with the publication in September 1921, of a leading article entitled: "Standard Methods of Dye Testing and an American Association of Textile and Color Chemists" which was further amplified by a subheading "How the Former May Be Obtained Through the Latter—Why an American Association is the Logical Body for the Determination of Standards—Objects and Membership—Hampering Traditions on the Wane." The result is the AATCC—now 36 years old and holding its Convention in the city of its inaugural meeting.

The cooperation between the AATCC and the REPORTER started as soon as the Association was formed. Following is the letter from Mr Howes to Dr E H Killheffer proposing the arrangement still existing:

* * *

September 27, 1921

Dr E H Killheffer, Chairman
Committee on Publicity and Publications, American Association of Textile Chemists and Colorists,
Passaic, NJ

Dear Dr Killheffer:

As you possibly know, the AMERICAN DYESTUFF REPORTER has taken a very active interest in the formation of the proposed Association of Textile Chemists and Colorists. Now that this Association is about to become a reality, the writer is anxious that the REPORTER should continue to cooperate in every way possible toward making the Association a complete success.

In this connection it occurs to me that we might be of service to the Association, during its infancy at least, by offering a portion of our pages to the Association for the purpose of carrying to its members reports of its meetings, committees, technical papers and such other matters as would ordinarily be contained in the journal of such an organization. With this idea in mind, I beg to make to you, as Chairman of the Committee on Publicity and Publications, the following offer on behalf of the Howes Publishing Company, publishers of the AMERICAN DYESTUFF REPORTER:

For a period of six months from the formation of the proposed Association we will place at its disposal a sufficient number of pages in the technical issues of the AMERICAN DYESTUFF REPORTER to carry all the material which the Association deems it advisable to print and distribute to its members. The form of the type matter and general arrangement of these pages can be supervised and directed by anyone whom the Assocation may designate as editor, or, if the Association prefers, we shall be glad to assume such supervision under the general direction of the proper officers. These pages can be kept as a separate section, distinct from other text pages in the REPORTER. During this six months' period we will agree to carry the name of every member of the Association upon our mailing list. For this service we will make no charge whatever.

At the expiration of six months, if the Association is satisfied with this service and desires us to continue it, we shall be glad to do so on a basis which will provide that the Association reimburse us for the actual cost of printing and distributing the text matter involved.

This suggestion is, of course, merely in skeleton form and is susceptible of modification or amplification, as the exigencies of the situation may dictate. The thought which I wish to convey is that we should be glad to relieve the Association of any expense incident to its publications for a period of six months and to continue the service thereafter at actual cost, if it is so desired.

The writer is prompted to make this offer because he presumes that the Association will wish to have some official means of keeping its members advised as to its proceedings but that financial limitations during its infancy will hardly warrant the expense incidental to the publication of its own journal.

Trusting that your Committee will give this offer consideration and advise me in due time of your decision in the matter, I am,

Faithfully yours,

A P HOWES

President, Howes Publishing Company

* * *

Dr Killheffer recommended at the Inaugural Meeting that this offer be accepted and it was unanimously adopted. Subsequently, when the Association became a corporate body, a contract was signed providing for the continuation of this service for fifty years. The contract was revised in 1947 and again in 1957 and extended for another fifty years.

In order to better serve the Association in the publication of its *Proceedings* the Monthly Technical Supplements and the weekly news edition were combined in January of 1922 and publication began on alternate Mondays with the *Proceedings* bound as the central portion of each issue. This arrangement continues in essentially the same form today.

Since the establishment of the Association, the REPORTER'S growth has been coincident with that of the Association. In 1931, ten years after the birth of the Association, the circulation was in the neighborhood of 2,500. Today, over 10,000 copies of each issue are printed and the Association's membership is over 7,100; there is a foreign circulation of over 1,500.

An interesting opinion on the agreement existing between the REPORTER and the AATCC was expressed in 1933 by Gordon D Pratt addressing the National Convention of the AATCC in Chicago as an official representative of the British Society of Dyers and Colourists when he said:

"The objects and works of our Society are very similar to your own, namely, the advancement of textile and colorist technology in its very widest sense. Our monthly Journal is, I think, as highly regarded on this continent for the excellence of its technical publications as it is in Europe. Incidentally, I would mention that the Journal is a continual drain on the funds of the Society and I think you relieve yourselves of a tremendous responsibility and financial expenditure, when you join as you do in a regular trade publication rather than attempt to publish your own journal."

As the Association has grown so has its publications in the *Proceedings*. Currently there is little of interest to the Association which is not also of primary importance to the REPORTER. The best of technical information in this country consistently appears in its pages.

In addition to Mr Reeser, the staff of the REPORTER is now headed by Norman A Johnson, Editor; Herbert A Stauderman, Advertising Manager; and Charles A Whitehead, Managing Editor. Mr Johnson joined the Howes Publishing Company in 1931 and now also holds the positions of Vice President and Treasurer. Mr Stauderman came to the organization in 1945 as a sales representative and was made advertising manager in 1951. Mr Whitehead assumed editorial duties in 1949 and was appointed managing editor later that year.

James A Doyle joined the Howes Publishing Company in 1946 in an editorial capacity, and following a second term of service in the U S Army during the Korean War, joined the staff of the REPORTER as Promotion Manager in 1952. His duties are also concerned with advertising and circulation activities.

Beryl A Lakner joined the Company in 1946 and was appointed Circulation Manager in 1955. William J O'Connor joined the Company in 1956 as Production Manager.

Mention must also be made of the invaluable contributions of our contributing editors: William H Cady, Abstracts; Dr Paul Wengraf, Patents; and Prof John H Skinkle, Book Reviews.

ABSTRACTS

Water-repellent Treatment of Textiles with Silicones

Watt, J A C, *J Textile Inst* **48**, T175-92, June, 1957

In the past, water-repellent effects on textiles have been achieved by the application of a wide variety of chemicals, both organic, eg, waxes, and inorganic, eg, hydrolyzable metal salts. In recent years, attention has been drawn to the excellent water-repellent properties of a new class of compounds, the silicones, which have been described as intermediate between organic and inorganic. These polymeric materials, composed of silicon, oxygen, and organic groups, are characterized by their unique structure, which consists essentially of molecular chains composed of alternating silicon and oxygen atoms, with hydrogen or organic radicals satisfying the remaining valencies of silicon.

Two types of process for treatment of textiles with silicone fluids have been examined by the author. The first involves the use of a reactive fluid, polymethylsiloxane, with an oil-soluble metallic salt (eg, tin naphthenate) as catalyst; the second involves a less reactive fluid, polydimethylsiloxane, and the water-soluble salt, zirconium oxychloride. The durability of these two finishes to washing and drycleaning are compared by the author, and the mechanisms by which the two processes operate are contrasted. It is shown that the first owes its effect to the production of an insoluble film around each fiber, whereas the second may operate by adsorption of the fluid through the siloxane linkage to the fiber surface, which is covered with deposited zirconium oxide.

The author gives full details of the two processes. The fluids are applied to the fabric in the form of dilute oil-in-water emulsions. After padding, the cloth is air-dried and finally baked for 5-7 minutes at 150° C.

From the experimental evidence, the author concludes that the zirconium oxychloride acts in two ways in silicone treatment of cloth: 1) by imparting some degree of water-repellency itself following partial or complete hydrolysis on the fiber, and 2) by modifying the surface of the fiber to render it more adsorbent towards silicone fluids.

The water-repellency obtained by these two processes, as measured by a spray test, is given for nylon, Terylene, acetate, cotton, and rayon with and without a crease-resist resin finish.

Fifteen references to the literature are cited.—WHC

Cibacron Dyes

Widmer, W *et al*, *Ciba Rev*, No. 120, 4-30, June, 1957

Ciba Ltd has recently succeeded in producing dyes (now marketed under the name "Cibacron") which are able to form a chemical bond with cellulosic fibers. These dyes are water-soluble acid dyes. They contain a reactive group which combines with the hydroxyl groups of the cellulose molecule. Chemical reaction with the fiber occurs only at elevated temperatures (160-212° F) and in the presence of alkalis. This process links the dye to the fiber permanently.

In principle, Cibacron dyes are suitable for dyeing all types of cellulosic fiber, both natural and regenerated. However, the yield obtained differs from fiber to fiber.

(*Concluded on page 850*)

Proceedings of the
American Association of Textile Chemists and Colorists

Copyright, 1957, American Association of Textile Chemists and Colorists

November 4, 1957

Thirty-Sixth National Convention

Auspices of the New England Region • Hotel Statler, Boston, Massachusetts

NOVEMBER 14, 15, 16, 1957

Greetings

FROM THE PRESIDENT

GEORGE O LINBERG
President

EVERYONE I meet these days is saying, "See you at the Convention." This is the one time each year when we gather from all parts of the land to seek new knowledge, to make new friends and to cement old ties.

The national convention is our best-known forum for technical discussion and the exchange of ideas in the field of chemical dyestuffs and finishes. To be present is to profit. No investment can pay such lasting and rewarding dividends as an AATCC convention. We will be better equipped to meet the problems in our daily work from what we learn. We will have much valuable information and many happy memories to take home from the 1957 Convention.

The historic city of Boston looms large in the traditions of AATCC, for here our Association was founded. We will be reminded by what we see and hear of the early struggle for the independence of our country and the birth and growth of AATCC. But most of all we will be a part of a great event to take place on November 14, 15 and 16. When assembled once again, we will look around us and say—this is the AATCC.

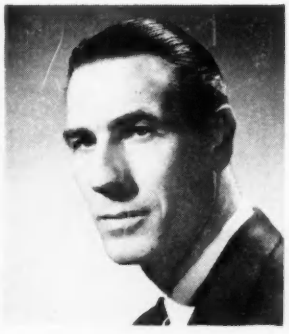
See you at the Convention!

GEORGE O LINBERG
President

Greetings

FROM THE VICE PRESIDENTS

ERNEST R KASWELL
Vice President
New England Region



WELDON G HELMUS
Vice President
Central Atlantic Region

H GILLESPIE SMITH
Vice President
Southern Region

ELLIOTT MORRILL
Vice President
Western Region

NEW ENGLAND REGION

IN the dual role of Convention chairman and vice president from the New England Region, it is my double pleasure to welcome the membership of the AATCC to Boston for the Thirty-Sixth National Convention. To some members, it will be a grand old reunion in the birthplace of the AATCC. To others, it will be an opportunity to become acquainted with the surroundings which gave birth to this organization. And to those less sentimentally inclined, the opportunity is to spend several days in hospitable New England; to dine in Boston's renowned restaurants; to sojourn on the New England coast; or, perhaps, to view the combination of visible history and modern progress that makes those of us from Boston speak, perhaps inaccurately, but reverently, of the "Hub of the Universe."

But set in this "New England splendor" is the Convention—and it is for it more than anything else that we gather. A convention that is not stimulating, educating, and relaxing has failed its purpose. To revive and renew inspirations; to exchange ideas; to listen, and teach, and learn: these are the goals of our technical program. To renew old acquaintances and form new ones, to bestow honors and hear messages from the honored: these are the functions of luncheons and banquets. And to round out a complete program for stimulation, education, and relaxation is the function of exhibits and entertainment.

Those of us who are planning the convention are conscious of these motives, and we intend that they will be incorporated in the 1957 program. We cordially welcome you to Boston and the Annual Convention.

ERNEST R KASWELL
Vice President (New England Region)
Chairman, 36th National Convention

CENTRAL ATLANTIC REGION

THE Central Atlantic Region is the largest, in point of members, of all the regions covered by our Association. It follows, therefore, that we should have the largest representation at the Convention in Boston. I call your attention to the excellent program and urge that you make every effort to attend. It is the only opportunity we have each year to meet with our friends and business acquaintances from all over the country for a mutually beneficial exchange of ideas and information.

See you at the Convention!

WELDON G HELMUS
Vice President (Central Atlantic Region)

SOUTHERN REGION

AS vice president from the Southern Region comprising the Piedmont, South Central, Southeastern and Washington Sections, I cordially invite you to avail yourself of this, your 36th National Convention.

Ernest Kaswell and his committee have gone all out to prepare an outstanding program that should be appealing to us all.

The exhibits, this year, revert to the all-commercial type, which are always of practical interest to those of us in the wet finishing of textiles.

The technical papers have been carefully selected and the hospitality and charm of Boston are well known.

May we look forward to seeing you at another instructive and enjoyable convention.

H GILLESPIE SMITH
Vice President (Southern Region)

WESTERN REGION

IN anticipation of the outstanding program and exhibition planned for the Thirty-Sixth National Convention, our individual and corporate members are making plans to see you in Boston. I am sure that the Western Region will be well represented as our members are keenly aware of the advantages of attending a National Convention in order that they may hear and see at first hand the presentation of up-to-the-minute technical papers and exhibits.

This is an opportunity for us to meet in an atmosphere of friendship with members and friends of our Association, and we are eagerly looking forward to seeing you at a most successful Convention.

ELLIOTT MORRILL
Vice President (Western Region)

Greetings

FROM THE NEW ENGLAND REGION'S SECTIONAL CHAIRMEN

NORTHERN NEW ENGLAND SECTION

EDWARD B BELL
Chairman
Northern New England Section

WE, of the Northern New England Section, are looking forward to welcoming you to Boston. We hope we will be greeting a record turnout of members and friends in 1957 at this 36th Annual Convention. Boston is the birthplace of the Association and, including the inaugural meeting on November 3, 1921, this will be the seventh time that it has been the host city for a national meeting of the Association. This will be the sixth national convention to be held in the city of Boston.

The committees have done an excellent job of preparing for what should be the best convention ever. In addition to the technical programs, tours, and entertainment arranged by the Association, Boston, itself, and the surrounding country, contains many beautiful and historical places of interest. Good hotels, good food, history, culture, fun—we have them all, and more! Whatever your major reason for making the trip, we know you will enjoy your visit to the home of the Bean and the Cod.

EDWARD B BELL
Chairman, Northern New England Section

RHODE ISLAND SECTION

REMUS F CAROSELLI
Chairman
Rhode Island Section

ON behalf of each member of the Rhode Island Section, I wish to express the real eagerness with which our group welcomes you to this Thirty-Sixth National Convention, which we and the members of our neighboring sections of Northern New England and Western New England are proud to be sponsoring.

Since 1790, when Samual Slater built this country's first cotton textile mill in Rhode Island, this area has sustained a warm spirit of receptivity toward anything even remotely related to the textile industry. It is in this same friendly spirit that we thank you for joining us in this atmosphere of mutual interests which is our Thirty-Sixth National Convention.

REMUS F CAROSELLI
Chairman, Rhode Island Section

WESTERN NEW ENGLAND SECTION

THOMAS J GILLICK, JR
Chairman
Western New England Section

THE Western new England Section is pleased to be able to participate as a sponsoring section in this Thirty-Sixth National Convention.

We certainly do hope that your return to Boston will be a pleasant one. I say "return," because Boston and the New England region is home for so many of us.

I hope that we will be able to make your trip worthwhile. Thank you for coming.

THOMAS J GILLICK, JR
Chairman, Western New England Section

TECHNICAL PROGRAM*

(All Events at the Hotel Statler)

Thursday, November 14

10:00 AM to 12:00 Noon—TEXTILE WASTE DISPOSAL SYMPOSIUM—Ballroom

Chairman: Duane W Snyder, Crompton-Shenandoah Co

"Pollution Control of New England Interstate Waters"—Joseph C Knox, New England Interstate Water Pollution Control Commission

"Disposal of Combined Textile Finishing Wastes and Domestic Sewage"—George G Bogren, Weston & Sampson

"Treatment of Mixtures of Textile Wastes and Domestic Sewage. IV—Research in Various Methods of Treatment"—R Hobart Souther and Thomas A Alspaugh, Cone Mills Corp

1:25 PM to 4:30 PM—GENERAL TECHNICAL SESSION—Ballroom

Chairman: Alfred N Henschel, Warwick Chemical Co Div of Sun Chemical Corp

"Textile Processing Chemicals"—Lester D Berger, Jr, Fine Chemicals Div, Union Carbide Chemicals Co

"What an Ultraviolet Reflectance Curve Can Tell About a Textile Material"—George Thomson, Charles A Lermond, and Ruth A Kenney, Fabric Research Laboratories, Inc

"Solvay Activated Hydrogen Peroxide Bleaching Process"—William R Steele and S M Rogers, Solvay Process Div, Allied Chemical & Dye Corp

"The Colorimetric Properties of Bleached Cotton"—E S Shanley, Arthur D Little, Inc

"Recent Developments in Electronic Instruments for Textile Processes"—Richard Hosmer, Electrical Products Div, The Foxboro Co

Friday, November 15

8:55 AM to 12:00 Noon— "A GLANCE INTO THE FUTURE"—Ballroom

Chairman: J Edward Lynn, textile consultant

"Economic Facts and Figures"—Raymond S Stevens, Arthur D Little, Inc

"High Polymer Prospects"—Herman F Mark, Polytechnic Institute of Brooklyn

"Fabric Trends"—Walter J Hamburger, Fabric Research Laboratories, Inc

"Chemical Trends in the Textile Industry"—Milton Harris, The Gillette Co

"Nuclear Energy—A New Tool for the Textile Industry"—Henry A Rutherford, School of Textiles, North Carolina State College

2:30 PM TO 5:30 PM—INTERSECTIONAL CONTEST—Ballroom

"The Study of Lightfastness of Selected Direct Colors on Cotton, Rayon and Cotton-Rayon Blends"—Delaware Valley Section

"Identification of Dyestuff Classes on Natural and Synthetic Fibers"—New York Section

"An Evaluation of Test Methods for Fulled Fabrics"—Northern New England Section

"The Effect of Resin Finishes on the Lightfastness of Vat Dyes. Part II"—Piedmont Section

"Metallic Contamination in Peroxide Bleaching"—Southeastern Section

Saturday, November 16

8:55 AM to 12:30 PM—TEXTILE PROCESSING—Ballroom

Chairman: Carlyle Harmon, Chicopee Mfg Corp

"Automation with Process Instruments"—Walter H Ridley, The Foxboro Co

"Scouring Grease Wools Neutral"—Emil C Hansen, Antara Chemicals, Div of General Aniline & Film Corp

"Control of Wool Fabric Shrinkage with Polyamide-Epoxide Resin Finishes"—C E Pardo and R A O'Connell, Western Regional Research Laboratory, U S Dept of Agriculture

"Elimination of Static Electricity from Textiles by Chemical Processing"—Emery I Valko and Guiliana C Tesoro, Onyx Oil & Chemical Co

"Effect of Laundering on Chlorine Retention and Crease Resistance of Cotton Finished with Dimethylol Ethylene Urea"—Osborne C Bacon, J E Smith, and L E Hughes, Tech Lab, Organic Chemicals Dept, E I du Pont de Nemours & Co, Inc

"Soiling Studies on Resin-treated Cotton Fabrics"—Robert M Reinhardt, L W Mazzeno, Jr, R M H Kullman, H B Moore, and J D Reid, Southern Regional Research Laboratory, U S Dept of Agriculture

"Effect of Finishing Treatments on Tear Strength of Cotton Fabrics"— E James Stavrakas and M M Platt, Fabric Research Laboratories, Inc

1:25 PM to 4:00 PM—TEXTILE DYEING—Bay State Room

Chairman: Charles L Zimmerman, Dan River Mills

"The Mechansim of Dyeing Orlon 42"—T Vogel and J M A deBruyne, American Cyanamid Co, and C L Zimmerman, Dan River Mills

"Dyeing of Zefran and Zefran Blends"—A S Messer, The Dow Chemical Co

"The Dyeing of Filament Nylon with Acid Dyes"—H P Landerl, J A Bittles, J A Brooks, and J J Iannarone, Jr, E I du Pont de Nemours & Co, Inc

"Evaluation of Carriers for Dacron Dyeing"—P J Scott, The Tanatex Corp

"Some Considerations About the Azoic Insoluble dyes in Printing"—Dorel Marian, Compagnie Francaise des Matieres Colorantes

*See pages P833-40 for abstracts of technical papers and author's photographs, pages P829-32 for full information on the Intersectional Contest.

SPECIAL EVENTS

OLNEY MEDAL AWARD LUNCHEON—The Olney Medal Award Luncheon will be held at 12:30 PM, Friday, November 15, in the Grand Ballroom. During this affair, P J Wood, technical director of Royce Chemical Co, Carlton Hill, N J, will be honored as the Association's 14th Olney Medalist. For further details, see page P841.

BANQUET HONORING CHARTER MEMBERS—The Annual Banquet, traditional finale of AATCC Conventions, will be held Saturday evening in the Grand Ballroom.

As the Association has grown and prospered over the years, it has become increasingly aware of its debt to the Charter Members whose foresight and wisdom laid a solid foundation for the building of AATCC.

It is particularly appropriate that the 1957 Convention recognizes these members at the scene of the first meeting of AATCC thirty-six years ago in Boston. They will be honored banquet guests and will be presented Charter Member Certificates. President George O Linberg will make the presentations, and in his "State of The Association" address he will point out that the imagination and inspiration of the Charter Members have been responsible in many ways for the national and international prestige the Association enjoys today.

CONCERT—The Band and Glee Club of Harvard University, more than one hundred strong, will present a concert at 8:30 PM, Friday, November 15, in the Main Ballroom. The Band, praised equally for its musical ability and its skill as a marching band, has toured widely both in the United States and Europe with unqualified success. The Glee Club, glorified by critics from the United States and Europe, has sung in this country with the Boston, Philadelphia, Buffalo, Chicago, Toledo, Springfield, and Cleveland Symphony Orchestras. In its 1956 European tour, the Glee Club travelled 11,000 miles, visited eight countries; and in thirty formal concerts, was heard by more than 20,000 people, exclusive of radio audiences. Critics from London to Berlin and from Amsterdam to Florence were unanimous in their praise.

The joint concert will be the high point of entertainment at the Thirty-Sixth National Convention. The Main Ballroom of the Statler has a limitation of 1,200 people, and tickets will be distributed first-come, first-served.

TEXTILE DYEING AND FINISHING EXHIBITION—The 1957 AATCC Textile Dyeing and Finishing Exhibition will be open on Thursday and Friday, November 16 and 17, from 10:00 AM to 6:00 PM, and on Saturday, November 18, from 9 AM to 12:00 Noon. The exhibits will be displayed in the Georgian Room and Parlors and Ballroom Foyer on the Hotel Statler Mezzanine. (See pages P824-28 for map of display area, exhibit descriptions, and personnel in attendance).

208TH COUNCIL MEETING—The two hundred and eighth meeting of the Council will be held at 8:00 PM, Thursday, November 14, 1957 in the Trustees Room, Cumnock Hall, Lowell Technological Institute, Lowell, Mass.

LADIES PROGRAM

A program of special events for those ladies who may not care to attend the technical sessions has been planned. The Hancock Room on the mezzanine floor has been reserved for the ladies' headquarters.

Since transportation costs have been included in the price of the tickets, ladies must secure their tickets in advance. These may be obtained at the Convention Registration Desk, Mezzanine Lounge, Hotel Statler.

Thursday, November 14

Morning—Registration

Afternoon—Tour of historic Boston

Friday, November 15

Morning—Tour of Lexington and Concord

Lunch—Hartwell Farms

Afternoon—Tour of Harvard University and Massachusetts Institute of Technology

Evening—Concert by Harvard College Band and Glee Club in the Main Ballroom of the Hotel Statler

Saturday, November 16

Afternoon—Trip to Isabella Steward Gardner Museum will include conducted tour through the museum, a musicale, and tea.

Evening—AATCC Banquet

SPECIAL TOURS TO SCHOOLS AND RESEARCH CENTERS

Special tours are being planned for members and guests to visit various educational, research, and industrial organizations. Included are:

AATCC Headquarters and Lowell Technological Institute, Lowell, Mass.

Quartermaster Research and Engineering Center, Natick, Mass.

Massachusetts Institute of Technology (Textile Division and Compton Computation Center), Cambridge, Mass.

Fabric Resarch Laboratories, Inc (Industrial Textile Research), Dedham, Mass.

The Foxboro Company (Electronic Recording and Controlling Instruments), Foxboro, Mass.

Tracerlab, Inc (Industrial Applications of Atomic Energy), Waltham, Mass.

RECEPTION

Attendants at the Information Bureau, located adjacent to the Registration Desk, will be pleased to answer all questions. At the Registration Desk there will be a card file giving the names of registrants and their hotel addresses during the Convention.

The Reception Committee, readily distinguishable by their BLUE badge ribbons, and made up of members from each Section, will cooperate in giving out information and extending courtesy.

ORGANIZATION OF THE AATCC

National Officers of the Association

President ..... GEORGE O LINBERG, Synthron, Inc, 19 Madison Ave, Newtonville 60, Mass
Vice President (Central Atlantic Region) .... WELDON G HELMUS, Fair Lawn Finishing Co, Fair Lawn, N J
Vice President (New England Region) ..... ERNEST R KASWELL, Fabric Research Laboratories, Inc, 1000 Providence Highway, Dedham, Mass
Vice President (Southern Region) ..... H GILLESPIE SMITH, American Cyanamid Co, 1370 Spring St N W, Atlanta 9, Ga
Vice President (Western Region) ..... ELLIOTT MORRILL, The Best Foods, Inc, 1437 West Morris St, Indianapolis 6, Ind
Executive Secretary-Assistant Treasurer ..... GEORGE P PAINE, P O Box 28, Lowell, Mass
Assistant Secretary .... RICHARD R FREY, P O Box 28, Lowell, Mass
Treasurer ..... ROLAND E DERBY, Textile Aniline & Chem Co, Box 899, Lawrence, Mass
Treasurer Emeritus ..... WILLIAM R MOORHOUSE, P O Box 352, South Yarmouth, Mass
Founder ..... LOUIS A OLNEY (deceased)
Director of Research ..... HAROLD W STIEGLER, Lowell Technological Institute, Lowell, Mass

Standing Committees of the Council

Executive Committee on Research ... CHARLES W DORN, *Chairman*
Technical Committee on Research ..... C A SYLVESTER, *Chairman*
Publicity ..... JAMES A DOYLE, *Chairman*
Appropriations ..... ROLAND E DERBY, *Chairman*
Membership and Local Sections ... WELDON G HELMUS, *Chairman*
Publications ..... WALTER M SCOTT, *Chairman*
Corporate Membership ..... ALBERT E JOHNSON, *Chairman*
Constitution and Bylaws ..... WILLIAM A HOLST, *Chairman*
Conventions ..... FREDERICK V TRAUT *Chairman*
Technical Programs ..... J EDWARD LYNN, *Chairman*
Technical Supplies ..... GEORGE P PAINE, *Chairman*
Subject and Speakers Bureau ... MATTHEW I BABEY, *Chairman*
Archives ..... SIDNEY M EDELSTEIN, *Chairman*
Inter-Society Relations ..... CARL Z DRAVES, *Chairman*
Textile Education ..... HENRY A RUTHERFORD, *Chairman*

Student Chapters

ALABAMA POLYTECHNIC INSTITUTE, BRADFORD DURFEE COLLEGE OF TECHNOLOGY, CLEMSON COLLEGE, FAIRLEIGH DICKINSON COLLEGE, GEORGIA INSTITUTE OF TECHNOLOGY, LOWELL TECHNOLOGICAL INSTITUTE, NEW BEDFORD INSTITUTE OF TECHNOLOGY, NORTH CAROLINA STATE COLLEGE, PHILADELPHIA TEXTILE INSTITUTE, RHODE ISLAND SCHOOL OF DESIGN, UTICA TECHNICAL INSTITUTE

Councilors

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Northern New England: PHILIP S DURFEE, JOHN J HEALY, FRANK J RIZZO
Rhode Island: FRANCIS H CASEY, EDWARD H GAMBLE, RAYMOND B TAYLORSON, J WILLIAM TIMPERLEY
Western New England: RAYMOND J CAREY, J EDWARD LYNN

CENTRAL ATLANTIC REGION

Delaware Valley: CARLETON T ANDERSON, WILLIAM H BERTOLET III, ARTHUR W ETCHELLS, CLARENCE A SEIBERT, RICHARD A SHIMP
Hudson Mohawk: IRWIN J SMITH
New York: WILLIAM F BROMMELSIEK, PERCY J FYNN, JOHN H HENNESSEY, ARTHUR J KELLNER, HARRY MOORE, ROBERT L STUTZ, MAX WINKLER
Niagara Frontier: BERNARD K EASTON

SOUTHERN REGION

Piedmont: A HENRY GAEDE, CLARENCE HOOPER, JOHN V KILLHEFFER, HENRY A RUTHERFORD, R HOBART SOUTHER, PAUL B STAM
South Central: JACK ANDERSON
Southeastern: ROBERT B HALLOWELL, T HOWARD McCAMY
Washington: LAWRENCE L HEFFNER

WESTERN REGION

Mid-West: ERIC W CAMP, JOSEPH H JONES, J GORDON STOTT
Pacific Northwest: HUBERT DESMARAIS
Pacific Southwest: ROBERT A FLIEGEL

Past Presidents

ELVIN H KILLHEFFER, P J WOOD, WILLIAM H CADY, ALBAN EAVENSON, CARL Z DRAVES, THOMAS R SMITH, WILLIAM D APPEL, HENRY F HERRMANN, C NORRIS RABOLD, J ROBERT BONNAR, RAYMOND W JACOBY

Local Section Officers

New England Region

NORTHERN NEW ENGLAND

Chairman ..... EDWARD B BELL, Textile Aniline & Chemical Co, 49 Blanchard St, Lawrence, Mass
Secretary ..... AZEL W MACK, Dexter Chemical Corp, 100 Memorial Dr, Cambridge 42, Mass
Vice Chairman—R D ROBINSON *Treasurer*—W W PENNOCK

RHODE ISLAND

Chairman ..... REMUS F CAROSELLI, Owens-Corning Fiberglas Corp, Ashton, R I
Secretary ..... JAMES J DILLON, King Philip Finishing Co, Lonsdale, R I
Vice Chairman—T LARSON *Treasurer*—H B STURTEVANT

WESTERN NEW ENGLAND

Chairman ..... THOMAS J GILLICK, JR, American Felt Co Glenville, Conn
Secretary ..... ANDREW W GOODWIN, Princeton Knitting Mills, Watertown, Conn
Vice Chairman—J J CERVINI *Treasurer*—P P DuBIEL

Central Atlantic Region

DELAWARE VALLEY

Chairman ..... DONALD W ROBINSON, Para-Chem, Inc, Philadelphia 34, Pa.
Secretary ..... ERNST W EMPTING, General Dyestuff Co, 123 South 2nd St, Philadelphia, Pa
Vice Chairman—W S SOLLENBERGER
Treasurer—A E STUTZKE

NIAGARA FRONTIER

Chairman ..... WILLIAM H LEYKING, National Aniline Div, Allied Chemical & Dye Corp, 1015 S Park Ave, Buffalo, N Y
Secretary ..... NORBERT WEINBERG, Becco Chemical Div, Food Machinery & Chemical Corp, Sta B, Buffalo 7, N Y
Vice Chairman—K A LISTER *Treasurer*—A M VIDITZ-WARD

HUDSON-MOHAWK

Chairman ..... EDWARD A CHEVRETTE, Apex Chemical Co, 28 Oxford Rd, Albany, N Y
Secretary ..... FLOYD J SZUREK, Mohasco Industries, Inc, Amsterdam, N Y
Vice Chairman—M FISHMAN *Treasurer*—W DRAUTZ

NEW YORK

Chairman ..... DONALD E MARNON, American Aniline Products, Inc, 50 Union Sq, New York 3, N Y
Secretary ..... RICHARD P MONSAERT, JR, Puritan Piece Dye Works, Inc, 550 E 38th St, Paterson, N J
Vice Chairman—J A KOMNINOS *Treasurer*—R E MILLER

Southern Region

PIEDMONT

Chairman ..... CLEMENT O STEVENSON, Ciba Co, Inc, 1517 Hutchison Ave, Charlotte, N C
Secretary ..... LINTON C REYNOLDS, Riegel Textile Corp, Box 393, Ware Shoals, S C
Vice Chairman—W E RIXON *Treasurer*—J C KING

SOUTH CENTRAL

Chairman ..... J C WHITT, Standard-Coosa-Thatcher Co, Chattanooga 1, Tenn
Secretary ..... FRANKLIN E CATER, Ray-Ser Dyeing Co, Box 5037, Chattanooga 6, Tenn
Vice Chairman—E V HELMS *Treasurer*—E F JURCZAK

SOUTHEASTERN

Chairman ..... WILLIAM B GRIFFIN, Dexter Chemical Corp, 218 Beverly Rd NE, Atlanta, Ga
Secretary ..... EDWARD R RAVENEL, Morton Salt Co, 538 E Ponce de Leon Ave, Decatur Ga
Vice Chairman—T H McCAMY *Treasurer*—W B FAYSSOUX

WASHINGTON

Chairman ..... GEORGE P FULTON, National Institute of Drycleaning, Inc, 909 Burlington Ave, Silver Spring, Md
Secretary ..... NELSON F GETCHELL, National Cotton Council of America, 1832 M St, Washington 6, D C
Vice Chairman—A M SOOKNE *Treasurer*—L R MIZELL

Western Region

MID-WEST

Acting Chairman ..... JACK G KELLEY, E I du Pont de Nemours & Co, Inc, 7 S Dearborn St, Chicago 3, Ill
Secretary ..... WARREN B BROADBENT, Geigy Dyestuffs, 629 West Washington Blvd, Chicago, Ill
Treasurer ..... K M HARMS

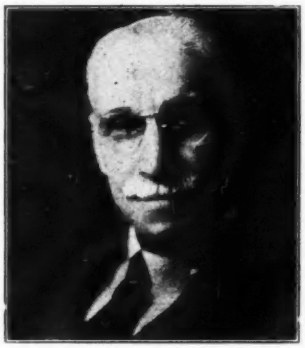
PACIFIC NORTHWEST

Chairman ..... THOMAS B KAY, JR, Thomas Kay Woolen Mills, 760 South 12th St, Salem, Ore
Secretary ..... FREDERICK H THLENRURG, National Aniline Div, Allied Chemical & Dye Corp, 730 Burnside St Portland 9, Ore
Vice Chairman—B R KOENIG *Treasurer*—D W KIMSEY

PACIFIC SOUTHWEST

Chairman ..... MELVILLE H BEHRENDT, Catalina, Inc, 443 South San Pedro St, Los Angeles 13, Calif
Secretary ..... CLARICE H LINDSEY, Univ of Calif, Dept of Home Economics, Los Angeles 24, Calif
Vice Chairman—H W ELLSWORTH *Treasurer*—W M CAMPBELL

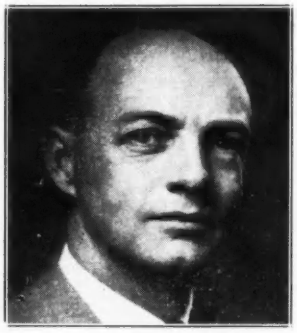
FOUNDER



LOUIS A OLNEY*
Founder and Past President
1922-1927

*Deceased

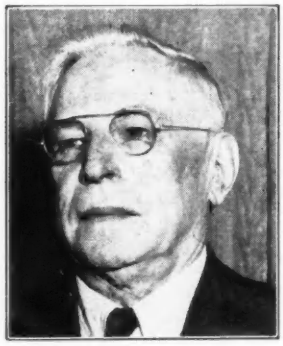
NATIONAL OFFICERS



GEORGE P PAINE
Executive Secretary
Assistant Treasurer

RICHARD R FREY
Assistant Secretary

ROLAND E DERBY
Treasurer



WILLIAM R MOORHOUSE
Treasurer Emeritus

HAROLD W STIEGLER
Director of Research

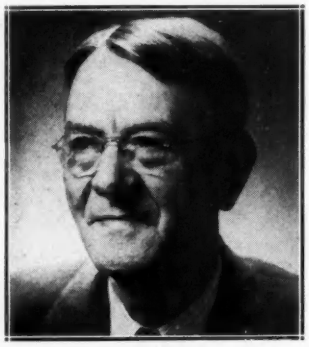
CHARLES W DORN
Chairman
Executive Committee on Research

PAST PRESIDENTS

(An asterisk follows the names of the deceased)

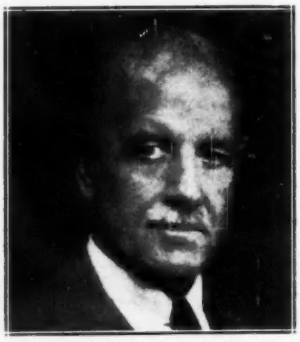
LOUIS A OLNEY* (Founder)
1922-1927

ELVIN H KILLHEFFER
1928-1930

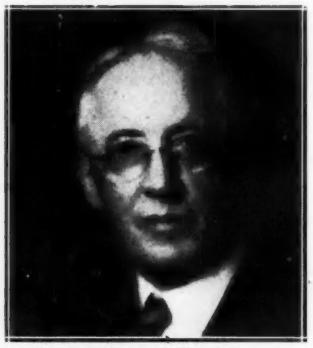


P J WOOD
1931-1932

ROBERT E ROSE*
1933-1935



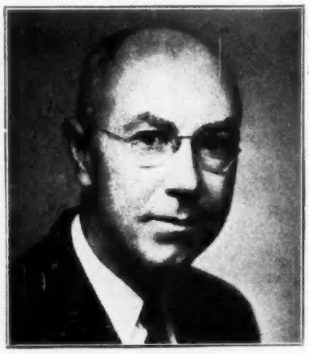
WILLIAM H CADY
1936-1937



ALBAN EAVENSON
1938-1939

CARL Z DRAVES
1940-1941

THOMAS R SMITH
1942-1943



WILLIAM D APPEL
1944-1946

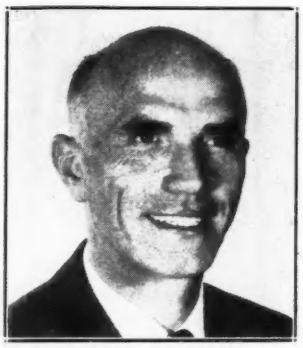
HENRY F HERRMANN
1947-1949

C NORRIS RABOLD
1950-1952

J ROBERT BONNAR
1953-1954

RAYMOND W JACOBY
1955-1956

CHAIRMEN—COMMITTEES OF THE COUNCIL



CHARLES A SYLVESTER
Chairman
Technical Committee on Research

WILLIAM A HOLST
Chairman, Constitution & Bylaws

SIDNEY M EDELSTEIN
Chairman, Archives

JAMES A DOYLE
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FREDERICK V TRAUT
Chairman, Conventions

HENRY A RUTHERFORD
Chairman, Textile Education

WALTER M SCOTT
Chairman, Publications

J EDWARD LYNN
Chairman, Technical Programs

JACKSON A WOODRUFF
Chairman, Intersectional Contest

ALBERT E JOHNSON
Chairman, Corporate Membership

MATTHEW J BABEY
Chairman, Subject & Speakers' Bureau

WALTER J HAMBURGER
Chairman
Employee Retirement and Pension

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Chairman, Dining

R JUNE ERICSON
Chairman, Entertainment

DONALD H THOMAS
Chairman, Exhibits

AZEL W MACK
Chairman, Finance

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Thomas J Gillick, Jr

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Finance

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Frank W Benvie
William W Pennock

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chairman
Stephen H Wilson

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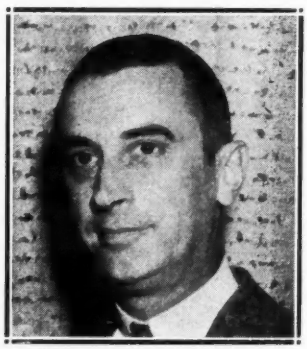
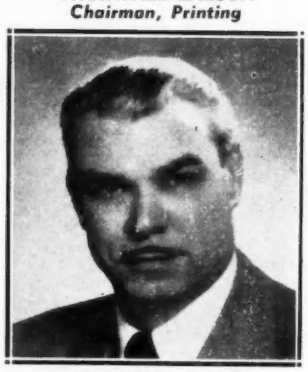
Mrs H C Chapin
Marion L Chapin
Mrs P S Durfee
Mrs K R Fox
Mrs R R Frey
Mrs H M Hartnett
Mrs E R Kaswell
Mrs A W Mack
Mrs G P Paine
Mrs F J Rizzo
Mrs A E Sampson
Mrs H W Stiegler
Mrs R W Jacoby
Mrs D E Marnon
Mrs H F Herrmann
Mrs B K Easton
Mrs F V Traut
Mrs A H Gaede
Mrs T R Smith
Mrs C R Gill
Mrs H G Smith
Mrs J H Jones
Mrs E Morrill



HARRISON M GORTON, JR
Chairman, Hotel

EDWARD S CHAPIN
Chairman, Ladies

THORWALD LARSON
Chairman, Printing



RAYMOND J CAREY
Chairman, Publicity

Printing

Thorwald Larson, *chairman*
James A Davies
Charles F Stokes

Publicity

Raymond J Carey, *chairman*
Michael E Keane
Alfred J Gondyke

Reception

Raymond B Taylorson, *chairman*
Francis H Casey
Arthur W Grover
J William Timperley
George C Morehouse
John E Hirn, Sr
Andrew W Goodwin
Rudolph C Geering
Paul W Reeves
John M Gould
Philip S Durfee
John H Jacoby
Robert D Robinson
John S Beattie
G H Momeier, Jr
John Wallace
F Vincent Mahoney
R A Shimp
A E Raimo
Donald E Marnon
Matthew J Babey
John J Hanlon
Herbert J Leavitt
Nelson F Getchell
Robert T Graham
Jack Anderson
C Russell Gill
Paul V Seydel
H A Desmarais

Registration

Robert J Peirent, *chairman*
John M Gould
Robert E Morrison
Earl R Wilbur
Edward J Allard
George C Perkins

Technical Program

J Edward Lynn, *chairman*
Peter P DuBiel
Alberic T DiMasi
Alfred N Henschel
Edward M Lynch, Jr
Arthur F McLean

7th AMERICAN DYESTUFF REPORTER AWARD

THE winner of the seventh annual AMERICAN DYESTUFF REPORTER AWARD will be announced at the Annual Banquet on Saturday, November 16, 1957 in the Grand Ballroom of the Statler Hotel, Boston, Mass.

Judges for this year's contest, appointed by the AATCC Publications Committee, are: R W Joerger, Franklin Process Co, *chairman;* R B Stehle, Allegheny Dye Works, and H C Borghetty, Rohm & Haas Co.

The Award was endowed by the Howes Publishing Company as a memorial to Alfred P Howes, founder of the AMERICAN DYESTUFF REPORTER. Its purpose is to encourage the presentation of the best possible papers before local and national meetings of the Association. The Award, $200 annually, is presented to the author or authors of the paper considered best in the opinion of the judges. Any technical paper presented before a local or national meeting of the AATCC and published in the *Proceedings* as they appear in the AMERICAN DYESTUFF REPORTER is eligible with the following exceptions: Intersectional Contest papers, papers by employees of the AATCC, reports of work substantially subsidized by AATCC, or reports of research committees. It is a condition of eligibility that the paper have its first publication in the *Proceedings*. Papers published in the *Proceedings* from July 1st of one year to June 30th of the next year are considered in each judging period.

The first presentation of the ADR Award was made at the annual banquet of the New York Convention on October 19th, 1951 at the Hotel Statler, New York, to Mason Hayek and Fred C Chromey of the Jackson Laboratory of E I du Pont de Nemours & Co, Inc. The paper chosen was entitled "The Measurement of Static Electricity" and was published in the March 5, 1951 issue. It had been presented before the Auxiliaries and Testing Group Meeting at the Portsmouth National Convention in 1950 by Dr Hayek.

The second presentation of the Award was made at the annual banquet of the Boston Convention on November 8th, 1952 at the Hotel Statler, Boston, to Charles J Lyle, Joseph J Iannarone and Robert J Thomas of the Technical Laboratory, E I du Pont de Nemours & Co, Inc. The paper selected was "High-Temperature Dyeing of New Synthetic Fibers" which was published in the September 17, 1951 issue and presented by Dr Thomas before the Rhode Island Section in Providence on May 25, 1951.

The third presentation was made to Robert H Blaker of the Jackson Laboratory, E I du Pont de Nemours & Co, Inc, at the annual banquet of the Chicago Convention on September 19th, 1953 at the Conrad Hilton Hotel in Chicago. The paper, published in the February 2, 1953 issue was entitled "Principles of Copper Dyeing of Polyacrylonitrile Fibers: The Controlled Redox-Potential Method" and was presented at the 1952 convention held in Boston.

The fourth presentation was made to Charles L Zimmerman, group leader for American Cyanamid Company's dyestuff department at the annual banquet of the Atlanta Convention on September 18th, 1954 at the Atlanta Biltmore Hotel. The paper which won the award for Mr Zimmerman was entitled "The Application of Dyes to Textile Fibers at High Temperatures" and was published in the September 14, 1953 issue. This paper was presented before a meeting of the New York Section on April 17, 1953.

The fifth presentation was made to Henry E Millson, manager of the Dyestuff Technical Service Laboratories, Organic Chemicals Division, American Cyanamid Company, at the annual banquet of the Atlantic City Convention on September 24th, 1955 at the Chalfonte Hotel. The paper which won the award for Mr Millson was entitled "The Microdyeoscope: Microscopical Observations on Dyeing" and was published in the June 20, 1955 issue. This paper was presented before several sections of AATCC as follows: New York, January 11, 1952; Southeastern, February 23, 1952; Mid-West, October 4, 1952; Philadelphia, October 23, 1953; and Rhode Island, January 28, 1954.

The presentation of the sixth Award was made to Fred Fortess of the Summit Research Laboratories of Celanese Corporation of America, at the Annual Banquet at the Waldorf-Astoria Hotel, New York, NY, on Saturday evening, September 15, 1956. The Award was for the paper "Dyeing, Finishing, and Heat-Treating Arnel Triacetate," which was presented by Mr Fortess before the New York Section on April 22, 1955 and was published in the August 1, 1955 issue.

YOUR HOSTS——THE NEW ENGLAND SECTIONS

As we, the Association members, gather to plan and to look forward—let us therefore, also, look backward, since:—

"The roads you travel so briskly lead out of dim antiquity, and you study the past chiefly because of its bearing on the living present and its promise for the future."—— Lt Gen James Harboard.

Northern New England Section

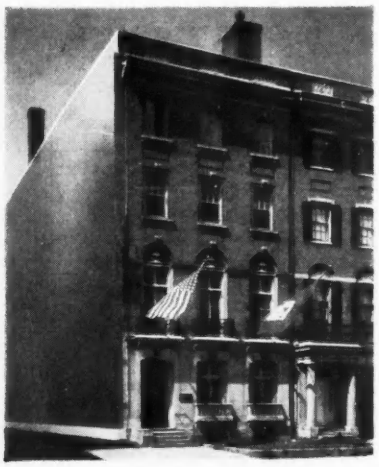
ALBERT E SAMPSON

TWO blocks from the Hotel Statler there still stands at the corner of Arlington Street and Commonwealth Avenue The Engineer's Club Building where the American Association of Textile Chemists and Colorists was founded. The Council Meetings were held usually on the first floor level in the room with the bay window above and to the right of the ground floor entrance. Dinner meetings were usually on the ground floor level in the rear of the building.

Historically, the Northern New England Section of the American Association of Textile Chemists and Colorists Incorporated occupies a most unique position in the Association in that, for the first few years of Association operation, this Section, to a considerable degree, was in fact and in deed—the Association.

That such was to be is easily explainable, for here were the motivating personalities of the organization. In its assigned area, the seed for the formation of the Association was sown; and, finding there a receptive and fertile soil for its germination, and enthusiastic and experienced hands to protect and cultivate its early growth, the Association has matured, blossomed and become fruitful in abundant measure.

Contrary to the belief of the many, the Northern New England Section was not the first Section to be formed. That honor goes to the Rhode Island Section for which they can thank Past President William H Cady, who, with his never failing quality of promptness, immediately after the Inaugural Meeting at the Engineer's Club in Boston on November 3, 1921, prepared the proper petition for a Rhode Island Section and filed it with Council at its first meeting in Boston on November 18, 1921.



Engineers Club
90 Beacon St, Boston, Mass

At the second meeting of the Council on December 9, 1921, Winthrop C Durfee presented the following petition for consideration by Council members in session at the Engineer's Club in Boston, Massachusetts:

Winthrop C Durfee
First "official" officer of the Section

"We the undersigned Charter Members of The American Association of Textile Chemists and Colorists, desire to organize a local Section in Boston, Massachusetts; and hereby request Official Approval of the Council as required by its Constitution." Signed:

Leander F Conley	Samuel J Nichol
Frank W Biery	Winthrop C Durfee
Thomas J Biery	Walter C Durfee
Walter W Carr	Joseph E Travers
John Everett	Amos K Hobby
John M Hood	H R Davies
Frank E Kenyon	W B Butterworth
Leonard S Little	B C Bond
Wilfred Lord	Robert E Fuller
A McMillan	H E Gile
George A Moran	F A Keyzer
Samuel Muirhead	J L Barrington
Charles L Parker	W R Moorhouse
William Welpley	A K Gyzander
William Woosman	Andrew Fisher
Louis A Olney	P S Crowell
Arthur K Johnson	John F Bannan
Fred V Hanson	Simon P Kenney
Charles L Howarth	William Stoeher
R B Clogston	Samuel A Stubbs
Fred Riley	Warren H Whitehill
R C Smith	

The petition was promptly approved, Winthrop C Durfee was elected "*secretary pro tem*," the name of Boston Local Section was assigned, and geographical boundaries defined. In the discussion of sectional affiliation, it was agreed, since the area covered all of New England except Rhode Island, that residents of Connecticut and Western Massachusetts for the sake of convenience could, if desired, affiliate with either Rhode Island, the proposed New York Section, or the Boston Local.

The Old Farmer's Almanac prediction for March 4, 1922 was "chill winds and snow flurries". The day proved to be exactly that with the Mark Twain "five-minute" variations of rain, slush, wind and temperature to make travel uncomfortable and hazardous. The only sunshine was in the smile of "*pro tem*" Secretary Winthrop C Durfee as he welcomed

Frederic Dannerth

George A Moran

A P Howes

at the Engineer's Club in Boston some fifty of the one hundred and eighteen prospective charter members at the inaugural meeting of the "Boston Local Section". Such an attendance of that magnitude under the inclement conditions was a heart-warming endorsement of the project.

At 6:30 pm Mr Durfee called the meeting to order. In his kindly and soft-spoken manner, this highly respected and genial chairman expressed with visible emotion his great satisfaction that at long last his dream of the past quarter century had come true, due to the able support and direction from local and New York sources. He was, as was characteristic of him, fluent in acknowledgement of the services of Frederic Dannerth, A P Howes, William D Livermore, George A Moran and Louis A Olney, and most modest of his own contributions. He gave instruction in the objects of the Association, the responsibilities of its members, and stressed that here at last was a meeting place and a forum for free discussion of the problems of its members and their guests and the activating of research to solve them. By every means possible, each member was to dedicate himself, by exemplary conduct, to raise the status of his profession, dispel the fallacy of the axiom too long prevalent in industry—"He travels fastest, who travels alone," and give serious attention to a study of uniform test methods for the industry.

At the conclusion of the Chairman's remarks, William R Moorhouse moved the chair appoint from the members assembled a nominating committee, which was so voted. William D Livermore as chairman, George A Moran and Louis A Olney accepted appointment and were instructed by the chair to retire and bring in to the session as speedily as possible a slate of Officers for the Section for the coming year.

William D Livermore

The Nominating Committee presented the following slate of officers for the 1922-23 session of the Section:

Chairman—Hugh Christison, chief chemist, Arlington Mills, Lawrence, Mass.

*Vice chairman**—Miles R Moffatt, chemist, Amoskeag Manufacturing Co, Manchester, N H.

Secretary — Arthur K Johnson, chemist, Lowell Textile School, Lowell, Mass.

Executive Committee — John F Bannon, chief chemist, M T Stevens Co, North Andover, Mass; Frank E Johnson, master dyer, Wood Mill, Am Woolen Co, Lawrence, Mass; Harry K Davies, manager, I Levinstein Co, Boston, Mass; and Warren H Whitehill, chief chemist, Brightwood Mfg Co, North Andover, Mass.

The nominations were opened for additions and discussion, and unanimously voted.

Mr Durfee congratulated the officers upon their election, inducted Mr Christison into office, and relinquished the chair to him.

Mr Christison expressed his pleasure for the honor given him, introduced the new officers, and presented for discussion a lengthy list of proposals. There was considerable discussion on a sectional name, and, after a heated discussion, the "Boston Local Section" designation was abolished and by unanimous vote "Northern New England Section" substituted. As near as can be ascertained, such was proposed by Alex Morrison. The meeting adjourned at 9:15 pm. All agreed the start was most auspicious and enthusiasm was of the highest order.

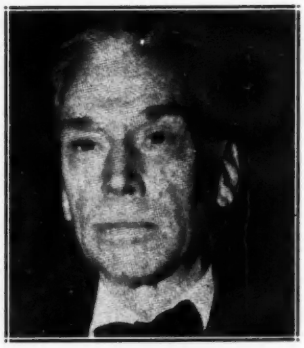
One hundred and eighteen Charter Members were on the membership rolls at the start of the Northern New England Section, as follows:

E W Adams
Tracy Adams
C N Alderman
G W Aspinwall
W P Atwood
W J Bailey
J F Bannan
J L Barrington
S W Bastow
A Behm
L Biach
T J Biery
F W Biery
B C Bond
A R Brown
G W Brown
L F Bume
F E Busby
W Butterworth
W W Carr
E S Chapin
H Christison
A A Claflin
R B Clugston
C B Coan
L F Conley
A W Craig
I H Creaser
P S Crowell
H R Davies
D DeGoencz
W C Durfee
Walter Durfee
John W Eich
John Everett
W H Fieldhouse
A Fisher
F E Fleming
R Fuller
H E Gile
E M Glennon
J H Grady
H D Grimes
A K Gyzander
F V Hanson
I O Harlow
W F Haskell
J H Hindle
A E Hirst
A K Hobby
F Holden
I M Hood
F W Hook
C L Howard
A K Johnson
A O Johnson
E Johnson
F E Johnson
S P Kenny
F Kenyon
F A Keyser
W A Kingman
H W Leitch
L S Little
W D Livermore
W Lord
R S Lunt
F L McCool
J B Manning
S N Mason
A McMillan
H A Mereness
C Middleton
A J Midwood
M R Moffatt
C Munro
W R Moorhouse
G A Moran
H S Mork
Alex Morrison
S Muirhead
S Munsall
W J Murray
G C Najar
J D Nowell
J Nichol
S J Nichol
L A Olney
W O Paisley
C L Parker
T Peel
G H Priest
L N Putnam
J M Richardson
F Riley
P F Ripley
W K Robbins
J W Russell
W Senior
L W Sidebottom
C A V Stootrum
R Smith
J V Smith
F Spencer
G Stewart
C H Stott
S Stott
W Stoeher
H I Thompson
J E Travers
B Verity
C P Waldinger
A H Webber
W Weldley
W H Whitehill
F A Whitney
W S Williams
I F Williamson
W Woosman

*In October, 1923, Miles R Moffatt also became treasurer.

Hugh Christison

Ralph E Hale



Charles H Eames

Today, there are on the sectional rolls only nineteen Charter Members, and six of these transferred to this Section from other areas at later dates.

Present Charter Members, now active members of the Section, are:

E W Adams
J L Barrington
S W Bastow
E S Chapin
R B Clogston
J N Dalton
W Durfee
W R Moorhouse
A Morrison
T Peel
L N Putnam
A E Sampson
L W Sidebottom
R R Sleeper
F Gainey
H E Gile
H D Grimes
M J Lane
H W Leitch

By 1928, the Association had matured to such proportions that, in view of the country's economic conditions, it was advisable to incorporate the Association. Dr Olney, on October 26th, became the first member of the Incorporation Committee, and, as staff members from the Section, the following were appointed to assist:

Charles L Howarth
Hugh Christison
Paul J Choquette
Harold W Leitch
George A Moran
Harold C Chapin
Alex Morrison
Clarence L Nutting
Lawrence F Ryan
John H Skinkle

The Commonwealth of Massachusetts approved the incorporation papers on March 5, 1929.

In 1947, the Section appointed a committee consisting of Ralph E Hale, *chairman*, Azel W Mack, Frank J O'Neill, and Delbert E Ray to draw up sectional bylaws. These were later presented and approved. Such are a more detailed interpretation of the Association's bylaws and as such have been helpful to less experienced sectional officers for constructive and harmonious planning.

It is noteworthy that, in organization fundamentals, there has been so little change since the Inaugural Meeting, which reflects great credit upon the Organization Committee for the Association. Rarely indeed does such permanancy of parliamentary jurisprudence prevail, and to William D Livermore and his Bylaws Committee the Association can be grateful indeed.

SECTIONAL GROWTH———The growth of the Section presents some startling figures percentagewise for the reason it started with an enrollment of better than 40% of the Association membership. With the newer types of memberships, such as Corporate, Junior, Associate, and Student, a high of 576 members was attained in 1952. Due to Association expansion through the years, and sectional transfers, the Northern New England Section rolls today total 480 or 6.76% of the Association membership of 7117.

This drop in percentages is not disturbing to either sectional or national officials. It has ever been the tradition for New England to send her sons and daughters, and her industries, to those locations where environment and economic conditions were better suited for their development.

Such thinking was admirably expressed by the Association's founder, Dr Olney, at the fourth annual meeting in Philadelphia.

> "Some of my fellow members on the Council have a habit of some times referring to this organization as my baby. I will admit that I was more or less in evidence at the time of its birth and perhaps bore a father's anxious look, but I think you will all agree that it has long since passed beyond the infantile stage and that we can all look upon it today and call it our child. It has not, however, by any manner of means reached maturity. There are many avenues along which it was originally planned that have scarcely been opened."

That his predictions have been fulfilled is indicated by the sections' percentage and bear witness to the statesmanship and executive cooperation of sectional personnel in Association and promotion.

Starting with an Association treasury as bare as the proverbial "Mother Hubbard Cupboard," there was no money for the rental of quarters for the Association. Realizing the paramount need of strict economy during the Association's formative years, Dr Olney generously offered his private office facilities at the Lowell Textile School for the conduct of the president's and secretary's affairs and the housing of their records. Mr Durfee did likewise by conducting the treasurer's duties from his office in Boston. Far too few give proper recognition of the Association's debt to these persons and the gracious academic interest of Principal Charles H Eames of the Lowell Textile School (now Lowell Technological Institute) in granting and encouraging free use and free rental of the School's quarters, personnel, and facilities in promoting the objectives of the Association during his entire career as the institution's chief executive.

It is also fitting at this time to pay tribute to Kenneth R Fox, Martin J Lydon, Harold W Leitch, Roland E Derby, Harold C Chapin and Francis Gainey for their helpful assist[illegible] in providing the Association adequate quarters for its expanding activities. Ambitious plans are still in the making at LTI for the Association as the building program develops, thanks to those mentioned and the cooperative trustees of the Institute.

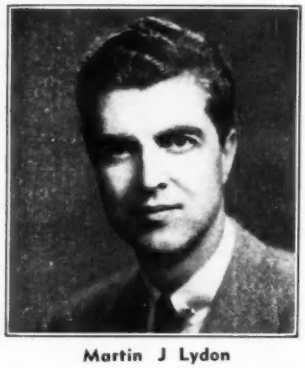
Such arrangements have not only been inspirational to the Section members, but they have brought to the students of the Institute during their four years of study, a realization and understanding of the Association's and the Section's achievements and objectives. Since these students in due time are destined to occupy key positions in industry, the rewards should, and are, remunerative Association-wise.

"As the twig is bent, so doth the tree incline" needs no explanation for the students of Robert Sleeper, Miles Moffatt, Harold Chapin, Elmer Fickett, Charles Howarth, Arthur Stewart, Herbert Ball, John McDon-

Kenneth R Fox

Harold W Leitch

Harold C Chapin



Martin J Lydon

Francis Gainey

ald and the many others whose patience and fortitude and fatherly advice guided many an outstanding executive of today through the uncharted and perilous waters of his youth. For those cases the Sectional and Association influence takes a modicum of credit.

NATIONAL OFFICERS AND COUNCILORS —— The Section's contribution to the roster of national officers has been generous and most complimentary. Modesty, sincerity, and service above self have been consistent virtues through the many years of personally financed affiliation. Those accorded national recognition are listed with their years of tenure in Office:

Presidents	
Louis A Olney	1922-1927
William H Cady	1926-1937
George O Linberg	1957-1958
Vice Presidents	
William D Livermore	1922-1926
William H Cady	1923-1924
Alex Morrison	1931-1934
Roland E Derby	1941-1943
Hugh Christison	1944-1945 1946
John N Dalton	1947-1948-1949
George O Linberg	1950-1951-1953-54-55
Ernest R Kaswell	1956-1957
Treasurers	
Winthrop C Durfee	1922-1929
Walter C Durfee	1929
Harry R Davies	1930-1932
William R Moorhouse	1932
Albert E Sampson	1953-1957
Roland E Derby	1957
Assistant Treasurers	
Albert E Sampson	1950-1953
Secretaries	
Walter E Hadley	1922-1928
Alex Morrison	1929-1931
Harold C Chapin	1934-1956
Executive Secretary-Assistant Treasurer	
George P Paine	1956-
Assistant Secretary	
Richard R Frey	1953-
Chairman of Research Committee	
Louis A Olney	1921-1948
Director of Research	
Harold W Stiegler	1946-
Councilors	
George A Moran	1922-1932
William K Robbins	1922-1926
William R Moorhouse	1923-1932
Hugh Christison	1927-1934
Carl Z Draves	1933-1934
Councilors at Large	
Carl Z Draves	1935-1937
Hugh Christison	1935
Dexter R Kneeland	1939
Councilors Representing Sections	
Roland E Derby	1934-1937
Harold W Stiegler	1939
Kenneth H Barnard	1940
Walter M Scott	1940
Dexter R Kneeland	1941-1943
Clarence L Nutting	1941-1942
John N Dalton	1943-1944
Harry M Hartnett	1943-1945
Edward S Chapin	1945-1947
Walter J Hamburger	1946 1948
Charles H A Schmitt	1944-1946
Delbert E Ray	1947
Armand A Klein	1948
C Wendall Lever	1948 and 1950
Edwin A Buthman	1949
Ernest R Kaswell	1949 and 1955
Sawyer F Sylvester	1949 and 1953
Gorden M Thompson	1949
Kenneth R Fox	1950
John M Gould	1950-1952
Edward B Bell	1951-1952
Frank J O'Neill	1951-1953
Elmer E Fickett	1953-1954
John P Ploubides	1954-1956
Robert D Robinson	1954-1956
Frank J Rizzo	1956-
Philip S Durfee	1957-
John J Healy	1957-

As concerns various national committees, the Section's representation has been equally as numerous and as diligent in service.

While never listed as an official on either national or sectional rolls, mention is made here for the record of Mrs Fred (Hazel E) Evanson, who handled all the routine work for Winthrop Durfee during his stewardship as treasurer. Since she was reimbursed by the payment of a lump sum per year, it can be stated she was the first salaried Association employee. She has now retired and lives at 21 Lincoln St, Melrose, Mass, with happy memories of the early Association activities when the entire National resources totaled $514.00.

NATIONAL HONORS —— The Section is proud indeed of the exemplary recognition of meritorius service of its members by the Association and the honorary certification of it by the following awards:

October 25, 1929—
The first Association Honorary Membership award to William K Robbins.

December 6, 1930—
The award of the title of president emeritus and life membership in the Council to Louis Atwell Olney at the Annual Meeting at Chattanooga, Tenn.

October 14, 1944—
The award of the first Olney Medal endowed by Howes Publishing Co, Inc to Louis Atwell Olney.

March 25, 1949—
The award of the title of founder to Louis Atwell Olney.

1949—
Honorary Membership Award to Walter E Hadley.

September 17, 1953—
The award of the title of treasurer emeritus to William Roy Moorhouse.

1953—

The award of Olney Medal to Roland E Derby.

Award of Honorary Membership to William Roy Moorhouse.

Award of Honorary Membership to Hugh Christison.

1956—

Award of Olney Medal to Walter J Hamburger.

November, 1957—

Award of Honorary Membership to Harold Canning Chapin; Award of Honorary Membership to Albert Edward Sampson.

These are they who have given so freely of their time and talent to Association activities and Sectional promotion. No small part of their success in the discharge of the duties assigned them was due to their ability to work harmoniously and with patience for the attainment of those purposes which have brough industry, technology and the Association closer together.

INTERSECTIONAL CONTEST ——The innovation of the Association's Intersectional Contest was received by the Section in 1940 with enthusiasm and its first Sectional committee for that project consisted of William R Moorhouse, *chairman*, Kenneth H Barnard, Albert E Sampson, Edward S Chapin, Clarence L Nutting, Roland E Derby, John N Dalton and Henry D Grimes.

The Committee offered, as its first contribution, a paper entitled, "What's New in New England". No prize was awarded the presentation, but it served to spark the idea of exhibits at annual meetings.

The record to date of the Northern New England Section in the annual Intersectional Contests shows one first place (1947) and six second places (1942, 1943, 1944, 1945, 1948, and 1949).

The presentations each year have shown most creditable originality and have been stimulating to research promotion and the clarification of timely industrial issues.

RESEARCH——Since the first meeting of the Association's Research Committee on December 9, 1921, NNE Sectional members have been outstanding in their contributions of time, facilities and cooperative laboratory and mill effort. The following Sectional members were on the original Research Committee:

Louis A Olney, chairman
Walter E Hadley, secretary
William D Livermore
George A Moran
William R Moorhouse (member at large).

Since that time there has always been a most helpful group in Research Committee service, both in administrative and working capacities.

A few of the many outstanding research programs directed and completed by Sectional members and their associates follows:

Program	*Personnel*
Carbonizing	Derby
Wool oils and their substitutes	Derby, Dalton, Morrison, Leitch, and Christison
Crockmeter	Durfee
Lightfastness standards	Christison
Launder-Ometer	Christison
Spectrophotometric Blends	O'Neil, Duntley
Olive drab	Christison, Dalton, Derby, Ryberg, Moorhouse, and Morrison
Interchangeability of sodium sulfate and common salt in acid wool dyeing	Dalton, Derby, Morrison, Nutting, Prisley, and Skinkle

Many more could be named which have brought prestige to the Association in establishing test methods and procedures approved and adopted internationally.

ANNUAL MEETINGS —— The Organization Meeting of the Association was held at the Engineers' Club, Boston, Mass, on November 3, 1921. Since, on that date, no Sections were in existence, it can be said that the meeting was directed to a considerable degree by the talent that was to later constitute the Northern New England Section. No pictures of the meeting are available, but the picture on page P809 shows those who attended the first Annual Meeting at the Hotel Pennsylvania, New York, NY, on Dec 2. 1922. For the most part, the same people attended both meetings.

Table I summarizes the Annual meetings sponsored by the Northern New England Section.

SECTIONAL PROGRAMS —— The first technical paper to be delivered before the Association was presented by W J Murray at the Organization Meeting in Boston, on Nov 3, 1921. His subject was, "The Differential Reduction of Vat Dyes".

Inspired by the favorable reception to Mr Murray's paper, Chairman Christison organized the Section's first Technical Program, which was presented on April 22, 1922, and featured the following papers:

William K Robbins

Walter E Hadley

Walter J Hamburger

Albert E Sampson

First Annual Meeting, AATCC, December 1922, Hotel Pennsylvania, New York, NY

"The Causes of Shady and Cloudy Goods" Louis F Bume, master dyer, Ayer Mills.

"Shaded Goods" Thomas J Biery, master dyer, Pacific Mills.

"Some Causes of Shadiness and Cloudiness" Frank E Johnson, master dyer, Wood Mill.

"Experience With Shady Goods" Leverett Putnam, piece goods dyer, Arlington Mills.

"Causes of Unevenness in Top Dyeing" Frederick Spencer, head dyer of tops, Arlington Mills.

This was an historic and never-to-be-forgotten program as it marked the first time in any area that dyers from five competing mills publicly discussed their occupational troubles. It was an experiment that took courage to present, and its successful handling was far reaching as it set a procedural pattern for years to come in sectional meetings and demonstrated the value of the Association's objectives.

To enumerate all the outstanding section meetings would be difficult, but some of the "firsts" the writer recalls from the limited number attended are as follows:

1) The first joint meeting in 1925 with the Rhode Island Section.
2) The first meeting of the Section held at Lowell Textile School (about 1926).
3) The first outing moving pictures by Walter Zillessen.
4) The "Piece Dye Kettle Surprise" by Harold Leitch. The meeting opened with Mr Leitch drawing a plan of a piece dye kettle on a blackboard and requesting comments. He was bombarded!
5) "Cationic finishes" and William Cady's heated argument with a supplier.

TABLE I
Annual Meetings sponsored by the NNE Section

Meeting	*Dates*	*Site*	*Chairman*	*Highlights*
4th Annual Meeting	Dec. 1925	Walker Memorial, Massachusetts Institute of Technology, Cambridge, Mass	Alan A Claflin	Visits to Lowell Textile School, Pacific Mills, Arthur D Little Laboratories, and Arlington Mills
10th Annual Meeting	Dec. 1931	Hotel Statler, Boston, Mass	Harry Davies	
18th Annual Meeting	Sept. 1939	Copley Plaza Hotel, Boston, Mass	Walter H Zillessen	"Shirt-sleeves Convention"
25th Annual Meeting	Dec. 1946	Hotel Statler, Boston, Mass	George O Linberg	First convention at which exhibits were set up
31st Annual Meeting	Nov. 1952	Hotel Statler, Boston, Mass	George O Linberg	"Million-dollar" head table; "Pops" concert

6) "Dyeing with Ponsol Blue BCS" by Carl Draves.
7) The first past presidents' meeting
8) Roland Derby's demonstration of matched shades and how light reflection alters the match as one views them at a distance.
9) "Vats in pressure machines" by Dexter Kneeland.
10) "Indigo Symposium," Linberg, Claflin, Leitch and Derby.
11) The first panel discussion by Dalton, Quigley, Byron, Emmons, Malloy and Moran, with Henry Grimes as moderator.
12) The Science Park Meeting—and many, many more.

Every effort has been made by the Section's officers to bring to the membership timely topics, good food, and enjoyable acquaintance, in a variety of dignified locations, and to maintain a decorum of discussion pleasing to all Association members attending and their guests. That, throughout the years the attendance has averaged about 25% of the sectional membership and speakers are always willing to come again, is adequate testimony of their success.

FORMATION OF STUDENT CHAPTERS ——— An organization known as the "Alembic Society" had been an active undergraduate activity at the Lowell Textile School for several years, and it had prospered most favorably under the guiding hand of Professor Olney and his staff. Its objective was to broaden the perspective of the students in the chemistry and dyeing courses during their undergraduate years.

At the first Council Meeting of the Association on November 18, 1921, it was suggested there be junior sections formed to augment senior membership, and, shortly thereafter, Council approval was voted. It was the opinion of the Council that such a type of membership was essential to attract the embryo members of the profession, and the sections were urged to develop the field with promptness.

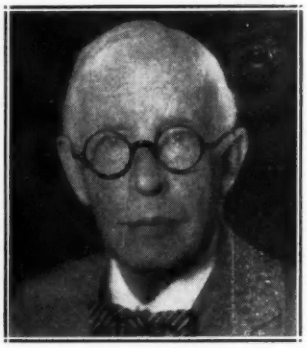
On December 16, 1922 the Alembic Society petitioned the Council for membership as a Junior Section of AATCC. It was granted at once, the Society disbanded and it became the first Junior Section with the following officers: Chairman—Everett V Steel. Vice Chairman—Edward B Bell, and Secretary-treasurer—Robert W Jaerger. It held its first meeting at the Lowell Textile School on March 22, 1923.

On January 22, 1932 the Council approved Student Memberships, and from that date organized student groups became officially designated as Student Chapters.

LTI STUDENT CHAPTER——— The Student Chapter at Lowell Technological Institute and the Northern New England Section have always had a close relationship. Each April, the Student Chapter sponsors a joint meeting with the NNE Section at the Institute and presents a dinner meeting and program, which is organized and directed by the Chapter members. It has been most successful, since it serves to bring together the Chapter, the Section, the Association and the Institute personnel and facilities. Its influence is most beneficial and far-reaching.

SECTION AWARDS———Believing that the recognition of outstanding service to the Section deserves local recognition, awards have been made by the Section to its members as follows:

1) Ralph Hale Memorial Scholarship.
2) Service scroll to Hugh Christison.
3) Junior Scholarship at LTI.
4) Sponsorship of flag presentation to Association from Charter Members at 25th Annual Meeting.
5) Portrait of Dr Olney presentation by Alan A Claflin.



Alan A Claflin

6) Presentation to Walter Hadley upon his retirement as Secretary, 6/14/29.
7) Silver Jubilee Outing honoring Charter Members.

During George Linberg's period as chairman of the Section, he held numerous meetings of committees at his home, and at each Mrs Linberg put on a true "Smorgasbord with all the fixings". For her gracious and commendable service she was awarded, by unanimous vote of the Section, a certificate of honorary membership in the Section. She is believed to be not only the first to receive such recognition but the only recipient of such award in the entire Association.

OUTINGS———"All work and no play, makes Jack a dull boy!" is a bewiskered adage, but its acceptance brought into being the Annual Section Outing, an affair of considerable importance which always attracts

(*Concluded on page P820*)

TABLE II
NNE Section Officials, 1922-1957

Years	*Chairman*	*Vice chairman*	*Secretary*	*Treasurer*
1922-3	Hugh Christison	Miles R Moffat	Arthur K Johnson	
1923-4	Hugh Christison		Arthur K Johnson	Miles R Moffat
1924-5	John F Bannan		Arthur K Johnson	John W Russell
1925-6	John F Bannan		Arthur K Johnson	John W Russell
1926-7	Harold W Leitch		Arthur K Johnson	Walter Durfee
1927-8	Harold W Leitch		Arthur K Johnson	Walter Durfee
1928-9	William H Cady		Harold C Chapin	John H Grady
1929-30	Henry D Grimes		Harold C Chapin	John H Grady
1930-1	Henry D Grimes		Harold C Chapin	John H Grady
1931-2	Leverett N Putnam		Clarence L Nutting	John H Grady
1932-3	Leverett N Putnam		Clarence L Nutting	John H Grady
1933-4	Roland E Derby		Clarence L Nutting	John H Grady
1934-5	Roland E Derby		John N Dalton	John H Grady
1935-6	Carl Z Draves		John N Dalton	John H Grady
1936-7	Carl Z Draves		John N Dalton	John H Grady
1937-8	Carl Z Draves		John N Dalton	John H Grady
1938-9	Clarence L Nutting		John N Dalton	John H Grady
1939-40	John N Dalton	Kenneth H Barnard	Edward S Chapin	John H Grady
1940-1	John N Dalton	Kenneth H Barnard	Edward S Chapin	John H Grady
1941-2	John N Dalton	Kenneth H Barnard	Edward S Chapin	John H Grady
1942-3	Edward S Chapin	Delbert E Ray	Azel W Mack	George O Linberg
1943-4	Edward S Chapin	Delbert E Ray	Azel W Mack	George O Linberg
1944-5	Delbert E Ray	J Clifford Emmons	Azel W Mack	George O Linberg
1945-6	Delbert E Ray	J Clifford Emmons	Azel W Mack	George O Linberg
1946-7	George O Linberg	Frank J O'Neil	Azel W Mack	Martin H Gurley, Jr
1947-8	George O Linberg	Frank J O'Neil	Azel W Mack	Martin H Gurley, Jr
1948-9	Frank J O'Neil	Ralph E Hale	Azel W Mack	Martin H Gurley, Jr
1949-50	Frank J O'Neil	Ralph E Hale	Azel W Mack	William W Pennock
1950-1	C Wendall Lever	Ernest R Kaswell	Azel W Mack	William W Pennock
1951-2	C Wendall Lever	Ernest R Kaswell	Azel W Mack	William W Pennock
1952-3	Ernest R Kaswell	John M Gould	Azel W Mack	William W Pennock
1953-4	Ernest R Kaswell	John M Gould	Azel W Mack	William W Pennock
1954-5	John M Gould	Edward B Bell	Azel W Mack	William W Pennock
1955-6	John M Gould	Edward B Bell	Azel W Mack	William W Pennock
1956-7	Edward B Bell	Robert D Robinson	Azel W Mack	William W Pennock

Rhode Island Section

R W JOERGER and W H CADY

THE Constitution of the AATCC, as adopted at the Inaugural Meeting on November 3, 1921, made provision for the organization of local sections. It read in part as follows, "Twenty-five or more members residing in any district may notify the Council of their desire to form a local section."

PETITION PRESENTED——Immediately after the Inaugural Meeting, all the members residing in or near Rhode Island were canvassed, and twenty-six signed a petition requesting the Council to authorize the formation of a Rhode Island Section, to be located in Providence. This petition was presented at the first meeting of the Council, held on November 18, 1921. The necessary authority was immediately granted, and W H Cady was appointed secretary *pro tem* to organize the Section. The boundaries were to be the same as those of the State of Rhode Island, but permission was granted to members living outside the state to affiliate with the Section, if they so desired. Later the boundaries were extended to include Bristol County in Massachusetts and all of Connecticut east of the Connecticut River. Rhode Island thus became the first of a series of local sections, which now cover almost the entire country.

ORGANIZATION MEETING——A meeting to organize the Section was held at the Tokalon Club in Pawtucket on December 30, 1921. Twenty-six members and two guests were present. After an informal dinner the secretary *pro tem* called the meeting to order and announced the action of the Council in approving the petition. It was unanimously voted to organize the Section at once, and Mr Cady was elected temporary chairman, and H N F Schaeffer, temporary secretary. The chairman was authorized to appoint a committee to prepare nominations for permanent officers of the Section and to present them at the next meeting. It was voted to hold meetings every six weeks except in the summertime. A poll of the members indicated a preference for Friday evening for meetings. Roscoe L Chase, former manager of the Arnold Print Works, then gave an informal talk on "Mercerization". The chairman followed with a brief account of the work of the Council and outlined the plans of the Research Committee for attacking the problem of standard fastness tests.

CHARTER MEMBERS——The fifty-eight Charter Members affiliated with the Section at the time of its organization were as follows:

C Nelson Alderman	John G Masson
Peter J Ariente	Morrell Mackenzie
Nelson Barlow	John McNeil
William H Cady	Herbert A Matteson
Roscoe L Chase	William Milne
Charles H Church	Charles I Milnes
John W Clark	Karl R Moore
Joseph H Creaser	Herbert S Morrow
Ralph F Culver	James Murray
Frederick C Cushing	Charles H Parish
Harold J Daigneault	J Albert Pawson
John N Dalton	Carroll W Peck
Rene J B Delys	Fred T Phillips
Paul F Estey	Phillip C Putnam
Duncan Ferguson	Herbert B Reno
Edgar R Ford	Henri N F Schaeffer
John H Grady	Herbert F Schwarz
John E Graham	Charles H Stott
Eugene S Graves	Harold B Sturtevant
James H Hacking	Tom Turner
Joseph H Handle	Joseph Vanslette
Arthur E Hirst	Ben Verity
John Hutton	John C Watson
Harry G Jackson	Fred H Webster
William T Joyce	Walter S Williams
Charles B Kendall	William H Wingate
John A Kydd	William Witte
Alfred L Lustig	Lawrence B Wood
Robert K Lyons	William P Wright

ELECTION OF OFFICERS——The second meeting of the Section was held on February 17, 1922, in the rooms of the Providence Engineering Society, with thirty members present. The nominating committee, R F Culver, chairman, reported the following nominations for the officers of the Section: Chairman—W H Cady; Treasurer—Ben Verity; Secretary—F C Cushing; Sectional Committee—R L Chase, J G Masson, H F Schwarz, W S Williams. By a unanimous vote, these men were elected. Robert S Weston, consulting engineer, then gave an illustrated talk of "Water Purification for Textile Purposes".

CHAIRMEN——Following is a list of Rhode Island Section chairmen over the years:

1922	W H Cady	1941-42	Ben Verity
1922-25	R F Culver	1942-44	H V King
1925-27	W S Williams	1944-45	H B Sturtevant
1927-29	John Hutton	1945-47	G H Wood, Jr
1929-31	R B Earle	1948	R W Jacoby
1931	D H Powers	1949	R W Joerger
1931-32	L L Bamberger	1950	E Broadbent
1932-34	H F Lawton	1951	P G Kolupaev
1934-37	J G Masson	1952-53	E J Chornyei
1937-39	R Haworth	1954-55	A F McLean
1939-41	A R Fletcher	1956-57	R F Caroselli

MEETINGS——From a small beginning, the Section has grown until it now contains over 600 members. Six or more meetings, for the purposes of business and presentation of technical papers, are held annually. At first these took place in the hall of the Providence Engineering Society, whose excellent facilities accommodate 200 persons, and were usually preceded by an informal dinner attended chiefly by the officers, committee members and speakers. Since 1949, the dinner and technical programs more often have been combined by meeting in a Providence hotel or restaurant with a larger attendance, which averages 175—200 at present.

OUTINGS —— The custom of holding an annual outing was inaugurated August 29, 1932, at the Warwick Country Club, and has been continued ever since, except for the period during World War II. The golf and fellowship have been extremely popular and the attendance has risen in recent years to 350. Another social event tried in the past three years has been a dinner-dance in May.

ANNUAL MEETINGS —— This Section was host to the National Association at its Annual Meetings held in Providence on three occasions: December, 1923; December, 1928 and December, 1936. The rapid growth of the Association has made it impossible to hold such Annual Meetings in Providence due to lack of hotel accommodations. To get around this difficulty, the 1950 Annual Meeting, with the Rhode Island Section acting as host, was held in Portsmouth, New Hampshire (with the knowledge and approval of the Northern New England Section).

STUDENT CHAPTERS——Within the boundaries of the Rhode Island Section, three Student Chapters of AATCC are functioning: one at New Bedford Institute of Textiles and Technology (New Bedford, Mass), organized in 1947; one at Bradford Durfee College of Technology (Fall River, Mass), organized in 1948; and one at Rhode Island School of Design (Providence, RI), organized in 1952. An invitation to attend a special meeting of the Rhode Island Section is extended annually to these student bodies.

INTERSECTIONAL CONTESTS——The liveliness of this Section is demonstrated by the ability and willingness of its members to work and think together on an annual project for the Intersectional Contest. Rhode Island won the first Contest, which was held in 1940, and has won a prize eleven times since.

Western New England Section

ANDREW W GOODWIN

The Western New England Section had its beginnings in 1948, when, at the AATCC Council meeting of January 9th, it was voted to allow the formation of a new Section by that name. The area assigned to it includes all of New England to the west of the Connecticut River, as well as some territory to the east of it in the states of Connecticut and Massachusetts not within the jurisdiction of the Northern New England and Rhode Island Sections. The Council appointed J Edward Lynn to serve as secretary *pro tem* of the meeting to proceed with organization of the Section.

The organizational meeting was held at the Hotel Garde, New Haven, Conn on Friday, February 27, 1948, with Dr Lynn presiding, and thirty-eight people in attendance. Two short talks were delivered by two past presidents of AATCC, William H Cady and P J Wood, on the history and growth of the Association. They along with Harold C Chapin, AATCC secretary, contributed many valuable ideas and suggested several practices for the infant section.

In addition to Dr Lynn and Messrs Cady, Wood, and Chapin, the following were in attendance:

J F Melody
P Bryden
W C Hill
G D McTeague
N A Johnson
C H Allard
R N Brownlee
E L Johnson
O Edelstein
J B Dick
J E Hirn
M D Reeser
E A Schuman
H H Taylor
E S Lamont
E L McPhee
C F Schilkowsky
J Boyko
R W McGaughey
J Dean
S V Vaniotis
P Peterson
R J Carey
M Johnson
M R Burnell
N J Glade
E J Troianello
E A Murray
A Balfrey
A A Hunter
A M Stamm
J M Hood
G F Adams
T Corn
F T Simon
W J Barnes

It was decided to hold the next meeting on April 2, 1948. Meanwhile, Dr Lynn was to continue as acting chairman, and Miss Eleanor McPhee, acting secretary, until said meeting.

On April 2nd, the second meeting attracted 93 members and guests to Rapp's Restaurant, Shelton, Conn, which was to become one of the Section's most frequent meeting places in the future. At this meeting, Milton Harris, Harris Research Laboratories, delivered the first paper to be presented before the Section, "Functional Fiber Properties." Also at this meeting, the Section elected its first group of officers, as follows: *Chairman*—J Edward Lynn; *Vice chairman*—Raymond J Carey; *Secretary*—Edward A Murray; *Treasurer*—Robert N Brownlee; *Councilor*—Harold H Taylor; *Sectional Committee*—O Edelstein, S V Vaniotis, John M Hood, and Joseph F Melody.

From that time, the Section has held regular meetings featuring outstanding speakers.

The first outing of the Section was held June 18th, 1948, at the Wallingford Country Club, Wallingford, Conn, and the affair has been held annually since that time. Outing officials have seen to it each year that everyone attending the affair has gone home with a prize.

The Section presented its first Intersectional Contest paper at the 1948 National Convention in Augusta, Ga. Claude H Allard headed the Committee, which also included Martha Johnson, Eleanor McPhee, and Ernest L Johnson. Mr Allard delivered the paper, entitled, "Effect of Resin Treatments on the Washfastness of Dyes."

In 1948, the Section had a membership of 97, which has increased to 168 in its tenth year of activity. This increase entitled the Section to send two councilors to national meetings of the Council for the first time in 1956.

The Section has known the following chairmen: Dr Lynn, Raymond J Carey, Rudolph C Geering, Arthur S Nyquist, Socrates N Vaniotis, and Thomas J Gillick, Jr.

EMPLOYMENT SERVICE AT CONVENTION

For the purpose of introducing members to employers, this Service will operate, without charge, from Thursday afternoon, November 14th, through Saturday morning, November 16th at the Boston Convention in the Hotel Statler. Members seeking employment should if possible register before the Convention, but members, as well as employers, may register at the Convention.

Every person expecting to use this Service in seeking employment is requested to write in advance to George P Paine, executive secretary, AATCC, Box 28, Lowell, Mass; for two blanks on which to state his qualifications and desires. For attachment to these, two photographs measuring about 2 x 2½ inches are desirable.

Employers registering with the Service at the Convention will be permitted to consult these records, and will be assisted in arranging interviews between 2:00 PM and 5:00 PM on Thursday; between 9:00 AM and Noon and 1:00 PM to 5:00 PM on Friday; and between 9:00 AM and Noon on Saturday. Representatives of educational institutions also are invited to register for the purpose of answering inquiries about their students.

TEXTILE COLLEGES IN THE NEW ENGLAND REGION

EDITOR'S NOTE: In this, the 1957 AATCC Convention Issue of AMERICAN DYESTUFF REPORTER, we salute the colleges of New England giving undergraduate courses in textile technology—Bradford Durfee College of Technology, Fall River, Mass; Lowell Technological Institute, Lowell, Mass; New Bedford Institute of Technology, New Bedford, Mass; and Rhode Island School of Design, Providence, RI. All four colleges support AATCC Student Chapters.

We are grateful to officials of the various colleges for the material contained in this presentation.

Bradford Durfee College of Technology

In accordance with the provisions of Chapter 475, Acts of 1895, the Bradford Durfee Textile School was founded in Fall River, Massachusetts, one of the largest textile centers in the country at that time, as a city-owned and operated textile vocational school. It opened in March, 1904, with five day and 163 evening students. The first principal was Joseph W Bailey. Four options were offered. A 3-year diploma course in General Cotton Manufacturing and two 2-year certificate courses in Designing and Weaving and in Chemistry and Dyeing.

Over the past fifty years there have been only six principals, of which one, Henry W Nichols, served for twenty-five years.

The school is governed by a board of eighteen trustees, three of which are members ex officio, viz, the Commissioner of Education, the Mayor of the City of Fall River and the Superintendent of Schools. The other fifteen are appointed by the Governor of the State. In 1918, the property of the school was deeded to the Commonwealth, and, since that time, the school has been a part of the Department of Education of the State and has derived its funds annually by legislative act.

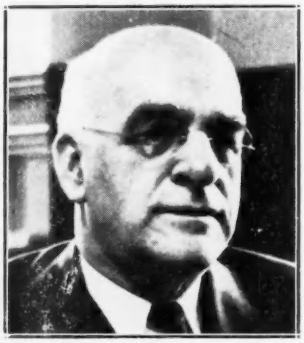
As time went on, the certificate courses were extended to three years and a course in Mechanical Engineering was added. By 1943, all programs led to a three-year diploma. The first move away from a strictly vocational approach came in 1935 when English Composition was added to the curricula of all options. Courses in Electrical and Civil Engineering had already been made a part of the engineering option. This had been done to meet the needs of the changing industrial conditions in Southeastern Massachusetts. It soon became evident that the name of the school did not properly indicate the broader scope of the educational offerings. Thus, in 1946, by legislative act, the name of the school was changed to the Bradford Durfee Technical Institute. Two years later, in 1948, after all programs had been brought up to the college level and extended to four years in length, the Board of Collegiate Authority of the State, acting under the provisions of Chapter 387, Acts of 1947, authorized the college to award the Bachelor of Science degree without designation of special fields of study. A final change came in 1957 when the name of the school was again changed to the Bradford Durfee College of Technology, thus avoiding for the future all confusion with the nondegree-granting group of schools offering less than a four-year curricula and known as technical institutes.

Original building, Bradford Durfee Textile School, as it appeared in 1904

At present, the College offers options in five areas of study: Art and Product Development, Business Administration, Chemistry, Engineering (Civil, Electrical, Mechanical and Textile), Textile Chemistry, and Textile Manufacturing and Management. The several curricula include approximately 20% general education courses, which are distributed about equally throughout the four years. English, languages, literature, economics, history and psychology are included.

The natural science courses include both organic and physical chemistry. Also, advanced courses in physics and mathematics through differential equations are offered.

On the staff are graduates of Harvard, Brown, Simmons, Northeastern, Univ of New Hampshire, Boston Univ, Univ of Cincinnati,



Leslie B Coombs
President, BDCT

Leslie B Coombs Science Hall—erected 1952.

Columbia, Temple, and MIT. Many of them have also had industrial experience with such well-know companies as General Electric, Westinghouse and Polaroid Corp. More than half of the instructors hold earned masters degrees and two are doctors. Because of their varied academic background, coupled with their years of industrial experience, they are highly qualified to carry out the strong technological program found at Bradford Durfee College of Technology. Several of them have also had research and development experience in Government laboratories.

The continually increasing enrollment over the years—the present figure is 471 day students and 821 registrations in the evening division—has made necessary expansion of the physical plant. The college had a modest beginning in 1904 in one building situated in the heart of the business district of the City of Fall River on land originally a part of the homestead estate of Bradford Durfee, who died in 1843 after a very active life devoted to the development of the Textile Industry in this city. The college takes its name from Mr Durfee. It now occupies five buildings, the most recent of which is the Leslie B Coombs Science Hall, a building housing the chemistry and physics classrooms and laboratories. The Hall is named for the present president of the college, who was for ten years head of the Department of Chemistry and under whose administration the school attained full collegiate status.

This year the college has purchased three properties adjacent to the school. It is planned to erect, in the near future, an engineering laboratory and a library-student union building. This project is now in the planning stage. A rapidly growing library, numbering at present some 6000-8000 volumes, is under the direction of a trained librarian, a graduate of the Simmons College library school. Here are to be found many technical works not duplicated in the Public Library of the City of Fall River.

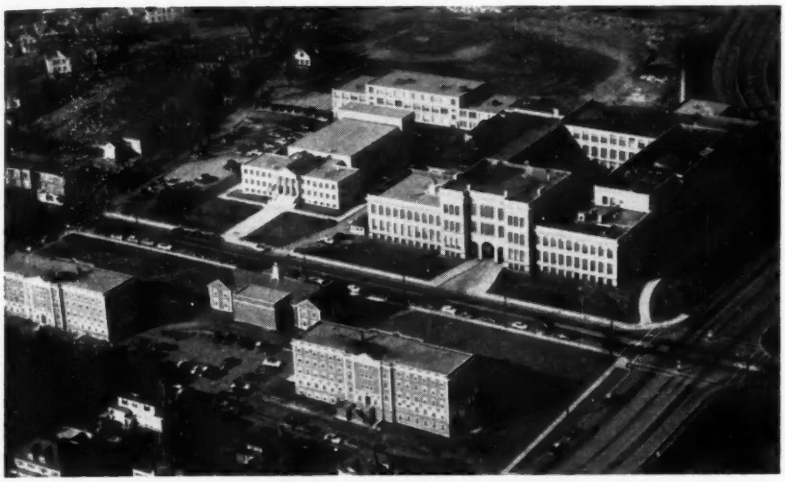
Among the student body are to be found men and women from foreign countries as well as a considerable number of students from states other than Massachusetts. Thus the College's graduates are to be found all over the world from Hong Kong to South America. Many of them occupy key positions in their fields.

In addition to the degree programs, the College offers some sixty-four courses in the evening division, a six-week summer school and a Saturday morning junior art school. Thus, each year, upwards of 1200 students are served by the various departments of the College.

Lowell Technological Institute

"GAY" was a word, not an outlook, at the dawn of the 1890's in New England's foremost industry—textiles, where a crisis had risen owing to the rapid development of the manufacture of coarser cotton fabrics in the southern states with their proximity to the cotton and coal districts. This could be met only by the application of science and art to the production of finer and more varied outputs which young men could not learn in the northern mills as they were at that time.

The instrument chosen by fate to help solve this problem was James T Smith, recognized as the "father" of the celebrated Lowell Textile School, which was begun to provide the technical knowledge for which the industry was crying out. This pioneer educator in the textile field had become aware that there were schools abroad supplying the skill that Lowell, Massachusetts—then the cotton manufacturing center of the world—would need to change the grade of its textiles. After making a considerable study of the foreign textile schools in preparation for a



Aerial view of Lowell Technological Institute campus.

similar program at Lowell, Smith interested members of the Middlesex Mechanics Association in favoring the proposed venture and obtained the endorsement of the Lowell Board of Trade.

Abetted by the judicious guidance and financial acumen of Alexander Goodlet Cumnock, to whom is accorded the title "founder" of the institution, James T Smith was responsible for establishing the textile school which quickly gained the international fame it maintains in the present day as the Lowell Technological Institute. Mr Cumnock, dean of the cotton manufacturing industry in New England, from its inception and for twenty-two years thereafter, was president of the school's Board of Trustees.

Incorporated in 1895, the school was opened in the Parker block on Middle street in Lowell February 1, 1897, but soon outgrew these quarters. At the instigation of Mr Cumnock, Frederick Fanning Ayer of New York generously agreed to give Southwick Hall in memory of his maternal grandfather through a contribution equalled by the Commonwealth of Massachusetts, and with this first donation for the new site the future of the Lowell Textile School was assured. That site, termed "a noble one of five acres" by Mr Smith, who became corporation clerk for the school, lies on the north bank of the Merrimack River, overlooking the falls first utilized in this country for power weaving on an extensive scale. Today, sixty years later, ten main buildings command an additional handsomely landscaped ten acres.

The first classes were conducted at the new location in January of 1903. Southwick Hall contained the chemistry, dyeing and finishing department, the departments of mechanical and electrical engineering, textile design and decorative art, and administration offices. Shortly thereafter Kitson Hall, housing the cotton department and spinning laboratories, was erected by the daughters of Richard Kitson. This included the self-sufficient power plant. The year 1903 also saw the completion of the Falmouth Street building, constructed to house the machinery of the weaving and woolen and worsted departments. On February 12 of that year, the school was dedicated in the presence of the governor and other distinguished citizens.

While private funds to start the school were doubled by matching contributions from the state, early donations were not only monetary. Machinery builders were extremely helpful, several, like the Lowell Machine Shops, giving equipment and, in some instances, personnel.

Progressive in its origin and subsequent history, the school at Lowell was always more technical than vocational in its educational approach. Development from a diploma-type school to an institution granting degrees in textile chemistry and textile engineering, in 1913, created a preponderance in enrollment of degreemen.

From the outset too, Lowell was an "all-fiber" school, which gave broader scope to its curriculum. Named, as was its geographical situation, for Francis Cabot Lowell, the textile inventive genius, the Lowell Textile School pioneered in instruction in finishing. Its wool finishing department was formed at the turn of the century to supplement the spinning and weaving curriculum, and the cotton finishing department followed shortly.

Beyond academic requirements for graduation, students were given examinations by representatives of the textile industry when candidates for employment. That they proved their worth was reported by Mr Smith five years after the opening of the school, when he informed the Lowell Board of Trade that the accomplishment of the school's aims was shown in the degree of excellence in industry attained by its graduates.

"While the Lowell associates had found the necessity for the Textile School in textile conditions at Lowell," he wrote, "study of foreign schools and the domestic textile situation had convinced them that in providing for the necessities of Lowell they were providing for like necessities of the textile industry throughout the Commonwealth. A school for thorough scientific instruction in the theory and art of textile and allied industries was demanded, and they believed it would be wiser to concentrate expenditures to secure such a school, rather than in response to local pride to establish several second-class schools. They have, therefore, from the first regarded the Lowell school as a state rather than a local school."

First director of the school was Christopher P Brooks, an Englishman who had spent some time in the South and who came to Lowell from Charlotte. He served as head for one year. Designed for "instruction in the theory and practical art of textile and kindred branches of industry," the school was managed by an incorporated body of trustees, composed of twenty permanent trustees, two appointed for four-year terms by the governor, the mayor, superintendent of public schools, and the presiding officers of the two branches of the Lowell City Council, and an annually-elected representative of the Lowell Textile Council, a labor organization. A proviso of the original bylaws made three-fourths of the permanent trustees men directly interested in the textile industry.

Equipment was sufficiently complete to convert raw cotton or wool into the finished fabric without leaving the school, to accomplish which there were four regular courses, cotton or wool manufacturing, designing, chemistry, and dyeing. Each covered three years and included whatever allied subject was necessary to broaden and strengthen the course.

In the second year of its operation, William W Crosby, who held the S B

and M E degrees from the Massachusetts Institute of Technology, became head of the school and served as principal from 1889 to 1906. The early faculty included such brilliant men as Louis A Olney, head of the chemistry, dyeing, and finishing department; Vesper L George, graduate of l'Academie Julian in Paris, later to become founder of the Vesper George School of Art in Boston, head of the decorative art department; George H Perkins, noted mechanical engineer, heading that department; and Paul E Kunzer, president of the New England College of Languages, in charge of commercial languages at Lowell. Joining the faculty in 1906 was Herbert J Ball, an MIT graduate, who in June of 1957, now with the status of emeritus, was presented an honorary doctor of science degree by Lowell Tech as originator of the concept of a textile engineer.

In 1906 too, thirty-nine years of outstanding service were begun by Charles H Eames, when he took office as principal after serving as secretary of the school. Upon this leading educator, community planner, and gifted mechanical engineer-MIT alumnus was conferred the stature of president in 1918 when the Commonwealth of Massachusetts, no longer to contribute to the support of private schools, with the approval of Lowell's Board of Trustees, took over the ownership of the school which has prospered under its wise leadership.

The move toward the scientific was constant, and even in the early days dreams were entertained which have materialized. Dr Olney's vision of paper and leather courses based on a thorough groundwork in chemistry came true at the turn of the present decade, when paper engineering and leather engineering were inaugurated. As the high quality of instruction continued and improved, the state empowered the school to change its name, in 1928, to the Lowell Textile Institute, to indicate more fully its collegiate status. And in 1935 authorization was granted to establish the LTI Graduate School, culminating a longtime dream of the trustees and faculty.

Dr Olney, who for 47 years headed the Institute's chemistry department, had also envisioned a professional society of chemists and dyers in this country, and as the result of ten years' thought and planning, presided at the organizational meeting on November 3, 1921 in Boston of the group which was to become the nucleus of the American Association of Textile Chemists and Colorists. Incorporated February 6, 1929, AATCC has maintained its headquarters and national research laboratories at Lowell from its inception. Dr Olney was elected first president, holding that post from 1921 to 1927, and in 1922 first chairman of the research committee, continuing in that capacity until 1947.

Consistent advancement of the Institute's programs brought about further diversification of its areas of specialization. As its reputation was built on the two early fields of concentration, textile engineering and chemistry, its prestige in the community and state, as well as internationally, supported the newer fields of scientific endeavor.

To the curriculum which boasted textile chemistry, engineering, technology and sales and management was added in 1950 paper engineering and leather engineering. The Institute entered the fields of electronic engineering in 1953 and plastics engineering in 1954. A course in general engineering was introduced in 1956, and in September of 1957 courses in chemistry and nuclear engineering were instituted.

In view of the present greatly expanded scope of its program, the Institute in 1953 underwent another name-change, to the Lowell Technological Institute. Now enjoying the status of a university, its bachelor of science and master of science degrees are equivalent to those of any college in the country, and the Institute is authorized to set up a program leading to the doctorate. Alumni have been accepted for graduate study at nearly all leading universities and are prominent in many fields of science and engineering. LTI's renown in textiles has attracted students every year from approximately 35 other countries.

Physical growth has kept pace with curricular expansion. In 1937 Louis Pasteur Hall, originally a one-story building, had been enlarged to four stories. With the coming of Kenneth R Fox as president in 1945, a Lowell alumnus who had obtained a further degree and taught at MIT, plans were initiated for a long-range building program. Two fine residence halls, erected in honor of James T Smith and Charles H Eames, were finished in 1948 and 1949, respectively.

More have been brought to fruition under the presidency of Martin J Lydon, a graduate of Harvard, who assumed office in 1950. The edifice built in 1952 to house paper, leather, and electronic engineering facilities was dedicated at LTI's observance of the Perkin Centennial in 1956 in honor of Dr Olney. The Alumni Memorial Library, completed in 1951 by alumni and friends, serves as a depository for Government publications and is available to industrial concerns through its Industrial Corporate Membership program. Cumnock Hall, the auditorium-administration building, was finished in 1954. And in June of 1957 ground was broken by the governor for a new structure, tentatively called the Industrial Research building.

Approximately $7,000,000 worth of scientific and industrial equipment is used in the instructional and research program of the Institute which has avowed from the very beginning its primary purpose of service to industry in the area and, secondarily, industry-at-large.

At the turn of the century, special service was furnished industry through consulting. That service was the forerunner of the LTI Research Foundation, established in 1950, which works in cooperation with the Institute to conduct research, development, testing, and consulting programs under contract with responsible agencies and industrial organizations. Further evidence of cooperation was given during World War I when this country's supply of dyestuffs, then about 95% imported from Germany, was cut off, and Dr Olney and the Lowell chemists were of aid to the United States government in producing samples and technical advice.

LTI's Evening Division has also rendered tremendous service to industry, providing extensive education in many fields to individuals and, through them, to innumerable plants. Great enthusiasm and appreciation have been expressed by graduates who secured certificates under that program. Two years ago programs were begun in the Evening Division offering associate degrees in engineering's various fields.

A broad scholarship program at the Institute gives tangible proof of the returned interest in its work displayed by industry. In addition to scholarship aid, industry has made notable contributions, chief among them support of the Library and upwards of $500,000 worth of machinery and equipment.

The Institute is coeducational, most of the distaff side selecting majors in textile design and chemistry. It holds full membership in the Senior College Division of the New England Association of Colleges and Secondary Schools, which is considered equivalent to regional accreditation by the U S Department of Education and the Armed Forces. The Engineers' Council for Profes-

sional Development extends full accreditation to the curricula in textile engineering.

During two world conflicts LTI cooperated with the Armed Forces. In 1918 a Student Army Training Corps unit was set up, which might be deemed a foreshadowing of the Air Force ROTC program currently in operation, and in World War II a short-term naval training program was conducted.

Lowell Tech has also entered into a cooperative plan with the Massachusetts Institute of Technology in a mutual exchange of use of textile libraries and manufacturing and research facilities. An extensive summer undergraduate and precollege refresher program is offered as are various professional advancement courses.

To give a well-rounded education to the young potential scientist and engineer, many courses in the humanities are offered. Dr Lydon has expressed the instructional policy of the Institute as "a sound and thorough grounding in the basic fundamentals of scientific fact; a practical and realistic inquiry into the ways in which these facts are applicable to certain areas of industrial specialization; and a broad and enlightened educational philosophy which emphasizes the development of the student as a socially useful, culturally conscious, and morally well-balanced personality."

A large number of the staff over the years has done considerable writing, as authors of technical articles, chapters in books, and complete books. The presence on campus of nationally important figures in industry, government, and education—several of whom have been awarded honorary degrees by the Institute—indicates widespread awareness of its work and worth. The success of a fine Placement Bureau yearly grows more noteworthy, and enrollment figures have consistently set records for the past ten years.

In this, the diamond jubilee year of the school, the words of James T Smith have application: "In textiles we advance or recede. We cannot stand still. And, as we advance, we must continue to go abroad for experts and skilled labor in higher lines or educate our own people. The Lowell Textile School is established for the latter purpose. It means higher skill, higher wages, higher citizenship." Ever widening its horizons, the Lowell Technological Institute yet strives to maintain this standard.

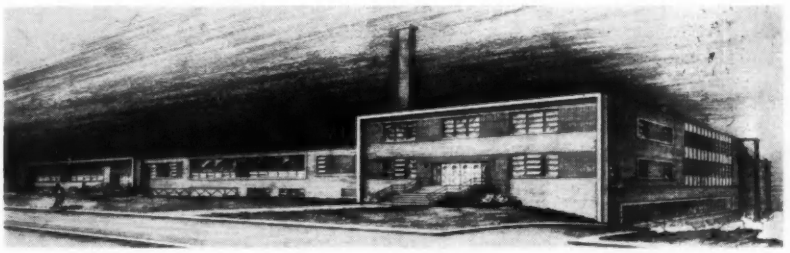
New Bedford Institute of Technology

The New Bedford Institute of Technology, one of the most modern and best-equipped institutes of its kind in the world, was established and incorporated by the Board of Trustees in August 1, 1895 under Chapter 475 of the Acts of 1895 of the Commonwealth of Massachusetts.

The first meeting of the Board of Trustees was held on January 27, 1896 and committees were appointed to supervise activities with relation to building, finance, physical equipment, education and other necessary executive functions. During the year 1897 the City of New Bedford appropriated $25,000 for the use of the school, and the Commonwealth of Massachusetts appropriated an additional $25,000 the following year. With these funds the first of the present six buildings was constructed.

The first building, consisting of three stories and a basement, comprised about 22,000 square feet of floor space. During the first 25 years of the school's existence, four buildings were added: three in the form of additions and one, the recitation building, a separate structure, was connected to the others by an overpass and tunnel.

For the first quarter century of its operation, the school functioned primarily in the training of students who were absorbed, principally, by the industry in various capacities of textile mill operation and production. In fact, for many of its early years of existence, very much of its service was extended through evening school classes, whereby employees of the textile plants, through vocational training, became supervisory staff personnel, a large portion of whom became (and some still are) leaders in the textile industry.



Architect's drawing of NBIT's proposed Engineering and Science Building.

With the advent of the present scientific conduct of the textile industry in the early 1920's, the principal purpose of the school was adjusted. In line with the technological improvements, the school has continually supplemented its courses and equipment and its present primary function is in the training of its students in the foundation of textile technology and engineering as required by the industry for management and executive level personnel. It has been its consistent policy to provide instruction in both the theory and practice in all phases of manufacture, dyeing and finishing, research and distribution of textile materials.

NBIT offers the Bachelor of Science degree in four major phases of the textile industry. These include Textile Engineering, Textile Technology, Textile Chemistry and Textile Design and Fashion. The latter course is an innovation in textile education, and has proven highly successful. It was introduced eight years ago, following extensive study and research on the part of the school management. Greater technological inter-relationship between the fabric manufacturers and the garment manufacturers, due principally to the ever-widening use of man-made fibers as well as modified natural yarns, fabrics and finishes, has created the need for students trained in related manner. The course in Textile Design and Fashion provides major study in creative design, supplemented with technical textile design, and a minor program in fashion design.

Under an act of the Massachusetts Legislature and with the approval of the Massachusetts Board of Collegiate Authority, the Institute is now authorized to grant Master of Science degrees in Textile Engineering and Textile Chemistry. At the present time only a limited number of candidates have been accepted for these degrees.

To meet a continuing demand for students trained specifically in textile processing, this school also offers a three-year program wherein the student receives a diploma in Textile Manufacturing. His program of courses is comparable to that of the four-year program with the elimination of mathematics and humanities needed in the degree programs.

In addition to its curricula in textile education, NBIT has, over the years, introduced majors in engineering relative to industrial areas other than those pertaining to textiles. These include the Bachelor of Science degree in Mechanical Engineering and in Electrical Engineering. The Institute's new Science and Engineering building, dedicated this past June, will be in use with the beginning of the semester in September. This building adds to the Institute's facilities further mechanical and electrical engineering laboratories, physics, physical and other chemical laboratories, four classrooms and an amphitheatre lecture hall. The expansion of its programs into nontextile fields considerably increases NBIT's educational services to the youth of southeastern Massachusetts.

The Institute boasted an enrollment of approximately 450 students in 1956 highlighted by an appreciable increase in the textile programs. The New Bedford Institute of Technology is proud of its professional standing and of the recognition it receives from industry. There is said to be a constant, repeating demand for graduates from all employers who have NBIT alumni on their technical staffs, officials of the Institute attribute this in large measure to the ability of graduates based upon NBIT's degree of practical training. That the Institute's reputation is world renown is evidenced by the large number of foreign students from many countries who attend each year. Many instances are included in the Institute's records of the attendance of students of two generations from the same family from various foreign countries.

Popularity of the Institute has increased by bounds since it was authorized to award degrees. Freshman enrollment for classes beginning this September is the highest in NBIT's history. Last year, for the first time, entrance examinations were held. The number of Freshmen to be admitted that year was 150 and applications for enrollment far exceeded that figure, President John E Foster announced.

Interest of manufacturers in the Institute and its training was pronounced chiefly during the last year when seven New Bedford firms established a total of 12 scholarships. Recently, Governor Furcolo of Massachusetts signed a bill which authorizes the City of New Bedford to appropriate sums annually to provide five additional $100 scholarships in each class for local students at the Institute.

During its 59-year history, the Institute has had six directors, known at various times as "president of the board," the title held by the first active director, the late Mr Briggs; dean and principal to president, the title held by today's director, John E Foster.

William E Hatch succeeded Mr Briggs as head of the Institute in 1908, serving until 1922 when William Smith was named principal. Mr Smith was succeeded by Joseph H Handford in July 1934. Mr. Handford served until 1936 when George W Walker was named principal. Mr Walker, now retired, served for 16 years and his duties were assumed by Dr Foster in 1952.

Further expansion and renovations at the Institute are in the planning stages, according to President Foster, and with the exception of two "money bills" dealing with funds for an addition and an auditorium, all recent legislation benefiting the Institute has been passed.

The name, New Bedford Institute of Technology, is recent. Previously, the Institute was known as New Bedford Institute of Textiles and Technology, and, prior to that, New Bedford Textile Institute.

NBIT has been authorized to establish a research foundation, to award honorary degrees, and to establish scholarships. Among financial measures are improvement plans estimated to cost $445,000.

Rhode Island School of Design

Last January, Rhode Island School of Design announced its decision to terminate degree programs in textile engineering and textile chemistry by 1960 when the last of presently enrolled students will be graduated. At the same time, the college made known its plans to broaden its offerings in textile design and to maintain its present program in apparel design.

Although John R Frazier, president of RISD, emphasized that the change should be regarded as a readjustment rather than an abandonment of its textile programs, it has become apparent in recent months that individuals and firms in the textile field have come to interpret the announcement to mean that the college is closing completely and immediately the four departments that make up its 54-year-old Division of Textiles. In the light of this reaction, RISD violates the rules of the assignment made by *American Dyestuff Reporter* for this AATCC convention issue to talk of the future rather than the past and to clarify its present position.

The trustee approval of the shift in emphasis in RISD's approach to textile education climaxed more than a year's study of the textile curricula in terms of the college's general purposes and the needs of the industry the four courses were originally developed to serve. Three factors were cited as prompting the move: 1) the consistently low enrollment in the textile engineering and chemistry majors, 2) the urgent need for more space to accommodate increasing enrollment in most of the college's 13 other areas of instruction, and 3) the School of Design's competitive position as a privately endowed institution located within 75 miles of three low-tuition, state-supported textile schools providing comparable instruction.

The final recommendation was based on the results of a survey conducted by an outside research agency, the opinion of the college's textile advisory committee and other industry representatives in Rhode Island, New York and the South, and the institution's experience in the conduct of a vigorous student recruitment campaign

during the past four years.

According to William D Fales, chairman of the Division of Textiles, most of the power equipment in the college's pilot plant and elements of textile technology instruction will be retained in effecting a major revision of the present textile design curriculum. "This revision is now in process, predicated on the belief that there is a growing need for the textile designer to understand not only the principles of color and design, but the properties of fibers and the technology of manufacture," he said. "We are enjoying the close cooperation of leading textile executives in our efforts to evolve a textile design program that will be without equal in this country or abroad. We estimate that it will take three to four years to bring the revised program into full and effective operation."

President Frazier expressed his regret that the persistence of a lack of interest among high school students in textile careers, reflected in substantially reduced enrollment at all but one of the country's ten textile colleges, had compelled Rhode Island School of Design to question the practicability of attempting to continue textile engineering and chemistry programs in which enrollment has stood at less than 50 percent of capacity for more than five years. Both majors, requiring the maintenance of a four-story pilot plant valued in excess of one million dollars, were at 38 percent of capacity when the decision to terminate the programs was announced.

The head of the 80-year-old institution joined with Dr Fales in stating that the reevaluation of the college's approach to textile education would in no way interfere with the completion of the four-year programs in the engineering and chemistry fields for undergraduates already enrolled. In support of this assertion, Dr Fales announced last February that two new power machines valued at more than $15,000 had been installed. He stated that the new equipment gave the School of Design the most modern and complete American System in any of the Country's ten textile colleges for the handling of all fibers, natural and synthetic.

The new machinery stood as solid evidence that the college intended to provide complete instruction in the textile engineering and textile chemistry majors for those students now at work in these programs. "While no new candidates for degrees in engineering and chemistry will be accepted the reorganization of the Division will entail no reduction in staff, no dilution of the present curricula," Dr Fales said.

President Frazier announced recently the appointment of Robert E Fatherley, merchandiser of women's dresswear fabrics for the Riegel Textile Corp, as a visiting associate professor of textile design to act as lecturer and chief consultant on the implementation of the proposed changes in the curriculum of this major. It is anticipated that by the fall of 1958, the college will be in a position to discuss publicly the direction and scope of the new curriculum.

When RISD graduates the last class of engineering and chemistry undergraduates in 1960, it brings to a close a chapter of its history that was begun, paradoxically, under the same type of conditions that have played a part in its ending. Early records indicate that in 1889 New England manufacturers were apprehensive of southern competition. It seemed probable then that the manufacture of coarse fabrics would go, leaving the fine and more fancy fabrics in the North. "We must," said a trade paper, "turn to the higher grades of goods in which superior skill counts for more than cost of labor and the accessibility of raw material." "The Rhode Island School of Design," it continued, "is doing work of first importance to this community; its practical and industrial training is doubly necessary in a manufacturing center."

In 1901, a joint committee of the Legislature recommended that a Textile School be established as a part of Rhode Island School of Design. In 1903 with the cooperation of the state and the industry, a textile department was opened. At first the new department undertook only elementary training, but with the addition of a few looms, a three-year course in the designing and manufacturing of fabrics was maintained for both day and evening students. It should be noted that the College has, through the years, trained thousands of employees of the textile industry in Rhode Island and neighboring Massachusetts and Connecticut. It will continue to operate courses in textile manufacturing and chemistry in its extension division so that local industry may still have an educational facility at its disposal where workers may find training that will assist in upgrading them in their jobs.

The years between 1903 and 1912 saw a great growth in demand for textile training and in the latter year a new building was erected and presented to the School through the generosity and interest of Stephen O, Jesse H and Manton B Metcalf in memory of their father. The same building is still in use, standing on North Main Street in downtown Providence, 162 feet long by 60 feet deep, of rough textured red brick and limestone trimmings. Its construction is fireproof with heavy reinforced steel concrete floors permitting the installation of heavy textile machinery. Its windows form 70 percent of the exterior walls, extending from the ceiling nearly to the floor.

Twenty years ago, trends in the textile industry seemed to indicate that, in the very near future, great technical changes would take place. Man-made fibers would perhaps not only compete with but might well take the place of the natural fibers in certain fields. It seemed likely that some individual processes would be eliminated and new sources of raw materials be discovered. RISD planned to be ready to meet the challenge by providing industry with young people educated at the college level and technically trained for positions of leadership in not only the design field but in basic manufacturing and scientific techniques that would take into account the revolutionary changes that seemed inevitable. It was recognized that such a program would involve a substantial installation of modern machinery and other equipment and that much of the old equipment would have to be discarded.

In 1936, George P Metcalf, the Whitin Machine Works, Davis & Furber Machine Co, the James Smith & Son Co and others generously made possible the installation of a complete set of 17 machines designed for the manufacture of worsted top and yarns on the Bradford System. This equipment was placed in operation in February of 1937 and represented the first step in the realization of long-range plans.

In 1939, the textile design and apparel design departments were brought together with the departments of textile engineering and chemistry to form the Division of Textiles. In 1954, Royal Little made possible the establishment of the New England Synthetic Fiber Foundation, its primary purpose being to interest the textile industry in the problems of education in Rhode Island School of Design. The recently disbanded New England Textile Foundation, which succeeded the Synthetic Fiber Foundation, together with the Rayon Foundation Trust, also established by

Mr Little, and many individual mills were most helpful in furthering modernization plans.

RISD's Division of Textiles now has in place a complete pilot plant with machines and equipment for processing both natural and synthetic fibers or blends; modern automatic looms on which instruction can be given in the weaving of all types of plain and fancy fabrics; dyeing and finishing equipment; laboratories well-equipped for inorganic, organic, physical and textile chemistry; a modern physics laboratory and a new air-conditioned physical testing laboratory; work rooms in which the design of printed and woven fabrics can be carried through to completion; and apparel design studios equipped with the latest high-speed machines for executing women's wear in the fields of both mass-produced and custom-made garments. The textile building has been reequipped with modern strip fluorescent lights and its interior walls colored in keeping with modern trends. The College's Museum of Art houses an extensive collection of historical costumes and textiles readily accessible for student use.

Over the past 54 years, Rhode Island School of Design has sent out hundreds of young men and women who hold positions of high responsibility in the textile industry today. It is the College's firm intention to continue to be of real service to the industry that has so substantially supported its program through the years. It will concentrate its resources upon producing in the fields of apparel and textile design graduates who are equipped to make significant creative contributions to the textile industry upon completing courses of study combining sound liberal education and professional training.

Northern New England—

(*Concluded from page P810*)

the largest Section gathering of the year. Sports, such as tennis, golf, baseball, horseshoes, darts, flycasting and similar activities, fill the hours for the younger members. Comfortable chairs, cribbage boards, and convenient access to "cooling comforts" furnish an atmosphere for the renewal of old friendships among the elder constituents. A buffet luncheon, and a dinner with no speeches followed by the awarding of prizes highlights the affairs.

The first Sectional Outing in the Association was held by the Northern New England Section in June, 1923, at the Merrimack Valley Country Club, Methuen, Mass. Andrew Fisher and Alan Claflin were the originators. There was some golf, but the features of the day were tennis and baseball. John Bannon and Alan Claflin gave an inspiring exhibition of tennis, for which they received plaudits. "Joe" Travers led his team to a one-sided victory in baseball, and Leon Sidebottom excelled at horseshoes. "Phil" Graham, George Linberg and "Jack" Grady probably earned all the golf honors. There were no prizes given, just honorable mention.

The social success of that outing, coupled with the interest it aroused and the favorable publicity it afforded the Association, led to its becoming a feature event in the annual Section calendar. It has now been adopted by most Sections of the Association. With increasing attendance it has been possible to expand the outing programs and award appropriate prizes to contest winners commensurate with their efforts.

Memory recalls a few outings of exceptional interest and events that contributed to their enjoyment.

Herman Metz and Charles Gagnebin were among the celebrities that graced the 1924 outing on July 10, 1924.

On July 13, 1925 Charles Herty, president of the American Chemical Society, was a guest at Outing held at the Vesper Country Club, Tyngsboro, Mass.

At the June 11, 1926 Outing, "Hy" Selya, disguised as Herr Dr Kluckenheimer, gave a dissertation on the "Ignorance of the American Chemist", which disturbed George Moran greatly before he realized it was a hoax.

"Bill" Cady's gracious acceptance of a cocktail shaker and set as a reward for winning at tennis.

The terrible golf scores of Eric Goullard, "Bill" Schmottlach, "Ken" Dorman and "Sonny" Senechal, which led to the creation of a "perpetual pass along" prize, a six-foot golf club equipped with horn, compass, level, trowel, flashlight, ribbons, and whatever else the recipient cares to add for the benefit of his "successor."

On June 9, 1950 the Section held a Silver Jubilee Outing to honor the Charter Members and gave each Charter Member attending an appropriate gift. Hugh Christison was given special recognition and a splendid ovation for his years of service to the Section. Some 300 were in attendance, making it the largest outing ever held by the Section.

There is no doubt about the effectiveness of an outing for the promotion of good fellowship and the Section's success in these affairs is due to the teamwork of the outing committees and their originality in entertainment and contest participation.

CONCLUSION —— Our "swing down Memory Lane" would not be complete unless recognition was given to the many who have, through the years, done much of the ground work for the many Sectional and Association projects and have not been mentioned herein with reference to some specific project or activity. For these, the yearly secretary's reports and Sectional rosters should bring to mind the splendid work they have done and a deserving accolade therefore.

Through the thirty six years of its existence the Northern New England Section can point with pride to its accomplishments and its service to the Association. What has been done may be attributed to a considerable extent to an unwritten creed which has prevailed in substance these many years.

"Were the American Association of Textile Chemists and Colorists Incorporated to do naught else, its work is well done if it promotes in the textile industry a better recognition and reward for the textile chemist and colorist through wider knowledge and appreciation of the faith, ambitions, talents and accomplishments of its leaders of the past whose lamps have lighted the way for management when darkness gathered around them."

May a continued adherence by the Section and its membership to these philosophies bring to all concerned a complete attainment of the objectives of the Association's Founding Fathers.

A Message to Association Members Concerning:

YOUR NATIONAL HEADQUARTERS

GEORGE P PAINE
Executive Secretary, AATCC

Members and guests attending the Boston Convention are invited to tour AATCC's National Headquarters' administrative offices and laboratories and Lowell Technological Institute on Friday, November 15.

Busses will leave from the Statler Hotel on Friday afternoon: time to be announced.

YOUR National Headquarters is made up primarily of people—20 in all. While we have about $25,000 worth of laboratory and office equipment to work with, this depreciates at the rate of ten percent annually. Your major investment is in the individuals whose value to the Association increases year by year through their training and experience.

The staff members probably best known to you are Harold W Stiegler, director of research, and Richard R Frey, assistant secretary. Dr Stiegler is in charge of the technical and research division, which is staffed by four technically trained assistants. These are George J Mandikos, G Robert Thompson, Glen M Kidder and Harlan E Glidden. Many of you are acquainted with them and their fine work. Dick Frey handles areas of administrative responsibility stemming from activities of various committees of the Council. This comprises the Senior staff group. Other key personnel include secretarial and clerical people and laboratory technicians.

I feel that, while we now have a well-rounded group, both in experience and capabilities, we will have an even greater number of specialists on the staff in the future as the Association continues to grow and develop.

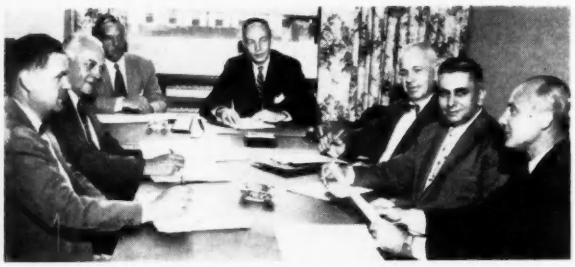
The work of an association's headquarters is made up of a great variety of activities—and the AATCC is no exception. Nearly everything done at Lowell is tied in with the program of a committee in one way or another. Since there are in all about ninety committees of the Association, we find we never want for some new problem which requires our attention.

We are your service force providing a permanent organizational structure for the Association. By association standards, we are a fairly good-sized outfit. We are handling about $200,000 a year in the conduct of the Association's business affairs. We keep the records of the membership of 7,000 individuals and 300 companies, and merchandise the technical supplies and equipment sponsored by AATCC. Incidentally, approximately 10 percent of the members are located in 47 other countries—from Finland to Formosa, from Ireland to India. We encounter all the things you would expect in the management of a small business—such as payroll, insurance, accounts receivable, accounts payable, purchase orders, budgets and financial statements. We are in fact a small business, and while we are in the nonprofit category, we measure our productivity in terms of service.

The National Headquarters provides the technical staff with a variety of laboratory facilities including such equipment as a Fade-Ometer, Launder-Ometer, Accelerotor, pressing machine, washing machines, a special room with humidity and temperature controls and a chemical laboratory. With these tools we are able to produce a wide range of tests in carrying out assignments from the research committees. Coupled with this, the staff does some experimental and development work. The Dynamic Dimensional Change Meter and the Accelerotor are examples of creative activities in the field of instrumentation in which the staff is engaged from time to time. We assist the committees and their officers in organizational and operating matters.

Our records are the official memory of the Association and its official history. We frequently have to look into a crystal ball. We serve as a clearing house of information both within and outside the Association. Many inquiries are directed to us. Here are a few recent examples: One company wanted information on shrinkage control of woolens, another requested an opinion on the advisability of using madras for drapery material. A lady from Louisiana requested information on hand printing processes, and a Pennsylvania concern wanted AATCC's test methods for washfastness. We also run an employment service. The usual question we get is, "Do you know of any good jobs?"

AATCC NATIONAL HEADQUARTERS STAFF—Seated, l to r: Glen M Kidder, George J Mandikos, Harold W Stiegler, George P Paine, Richard R Frey, G Robert Thompson, and Harlan E Glidden. Standing, l to r: Donald J Rafferty, Mrs Yvonne E Chateauneuf, Mrs Hazel M Crane, Miss Vera B Meehan, Mrs Marguerite T Burtt, Mrs Charlotte B Lawson, Mrs Elizabeth M Sharkey, Mrs Mildred B Mason, Mrs Mary L O'Malley, Mrs Emma R Goodale, and Robert Desmarais.



SENIOR STAFF GROUP—L to r: G Robert Thompson, administrative manager; Harlan E Glidden, research associate; Harold W Stiegler, director of research; George P Paine, executive secretary; Glen M Kidder, research associate; George J Mandikos, technical manager; and Richard R Frey, Assistant secretary.

Monthly conferences serve as report meetings to keep senior staff members abreast of recent developments and provide an opportunity to discuss new problems. The chairmanship and secretaryship of these sessions are rotated among members of the Senior Staff Group.

CONVENTION MAILING—General office staff pitches in to get out Convention announcements. L to r: Mrs Marguerite T Burtt, assistant for membership payments; Donald J Rafferty, shipping clerk; Mrs Charlotte B Lawson, editorial assistant; Mrs Mildred B Mason, office manager; Mrs Mary L O'Malley, assistant bookkeeper; and Mrs Elizabeth M Sharkey, assistant for membership records.

STAFF COMMITTEE ON OFFICE SYSTEMS AND PROCEDURES—L to r: Mrs. Emma R Goodale, secretary; Mrs. Mildred B Mason, office manager; and Miss Vera B Meehan, secretary, discuss methods for more efficient and economical office operations.

ACCELEROTOR—Mr Glidden; Mrs Yvonne E Chateauneuf, laboratory assistant; and Dr Stiegler run an abrasion test.

Your National Headquarters might be compared to the hub of a great wheel. The spokes are the lines of communication between the national office and the Council, the officers, the committees and the Sections. As the great wheel is turned by the energy of the membership and the staff, it generates the power of ideas behind the written and the spoken word. It is these ideas which make the Association breathe and live.

We at Lowell are endeavoring to develop new channels for the flow of information, not only within the Association but beyond its immediate perimeter. We are organizing ourselves into a more effective operating unit to give a better measure of service—for this is our job and our responsibility.

I would like to quote part of a memorandum to the staff, which may explain a little more fully what I mean by SERVICE. It reads as follows:

"The AATCC has reached a point in its growth where its committees have become so numerous and diverse that they must have organized staff support. Such staff support in no way contemplates assuming the accepted functions of committee activity but rather should strengthen the committees through coordinated staff services. Without vigorous committees, the AATCC could not maintain a democratic organization, representative of its membership.

AATCC NATIONAL HEADQUARTERS SITE—The Association occupies space in Southwick Hall through the courtesy of Lowell Technological Institute, Lowell, Mass.

"Efficient execution of an association program must be balanced with opportunity to enlist the talents of the members in order to express the board interest of the membership.

"Staff support of and services to Association committees is a specialized technique. It is accepted practice in Association operations that practically every activity is assigned to a committee. This concept has been highly developed and practiced by AATCC. Adherence to this principle has contributed largely to the standing the Association enjoys today.

"Each committee will have assigned to it a staff man in the National Headquarters organization. His function is to support the chairman and to provide staff services for committee activities.

"As an employee, the staff man is paid by the Association to give full

COLOUR INDEX—Mr Frey and Mr Paine discuss the wide interest of industrial companies in the Colour Index in such fields as aircraft, aluminum, motion pictures and photography, rubber, leather, soap, ink, cash registers and cosmetics.

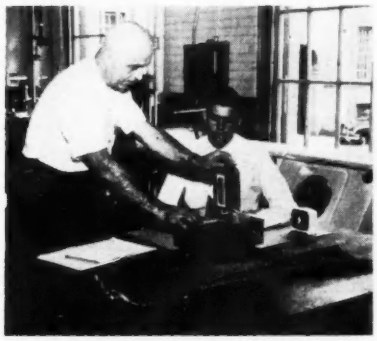
FLAMMABILITY TESTER—Mr Mandikos and Dr Stiegler prepare a flammability test in AATCC's laboratory.

time to Association problems. One of his most important jobs is to see that his committees receive recognition, honor and prestige for their accomplishments. The staff man, therefore, has himself an important stake in these same accomplishments, for they serve to measure his own performance and his value to the Association.

"Committee activity is the heartbeat of an Association. The combined results of committee activities justify the Association's being. It is the job of all of us on the staff to help the committees achieve their objectives and see to it that these achievements are communicated."

Space does not permit me to go into the details of our operations, but I have wanted to give you a feeling of the staff itself, a sense of our attitudes and an expression of our aims and ambitions for the Association. It is for your officers to make the policy pronouncements, for they are your elected spokesmen. Our job is to give them and you help and guidance—support and service.

All of us on the staff believe in the traditions, the purposes and the mission of AATCC. We believe in its growth and its future, and we want to grow with it.



SCORCH TESTER — Glen M Kidder demonstrates procedure to Robert Desmarais, laboratory assistant.

FADE-OMETER—Mr Paine observes a lightfastness test conducted by Mrs Crane, laboratory technician, and Mr Thompson.

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National Headquarters, American Association of Textile Chemists and Colorists

PO Box 28

Lowell, Massachusetts

Floor Diagram

1957 AATCC Textile Dyeing & Finishing Exhibit

ALL EXHIBITS AREAS ARE ON THE MEZZANINE LEVEL.

1957 AATCC TEXTILE DYEING & FINISHING EXHIBITION

EXHIBIT HOURS

THURSDAY, NOVEMBER 16 —— 10:00 AM — 6:00 PM
FRIDAY, NOVEMBER 17 —— 10:00 AM — 6:00 PM
SATURDAY, NOVEMBER 18 —— 9:00 AM — 12:00 N

ALCO OIL & CHEMICAL CORP

Trenton Ave & William St
Philadelphia 34, Pa
Booths 136-137

Exhibited will be: Vulcanol®—latex rubber compounds for upholstery and carpet backsizing, impregnating and saturating, and bonding nonwoven materials; Trenisol®— resin compounds for same uses as Vulcanol; Vulcarite®—latex compounding chemicals in dispersed form; Vulcacure®—ultra accelerators in dispersed form; Vulcafoam®—latex foam rubber compounds for textile applications; Alcogum®—synthetic gum thickeners, latex stabilizers, adjuvants for warp sizing synthetic yarns and natural and synthetic blends.

AMERICAN ANILINE PRODUCTS

A Unit of Koppers Company, Inc
Pittsburgh 19, Pa
Booths 101-102

Vats, vat dispersions, naphthols, wool dyes, and dyes for acetates and other synthetics will be featured. Dyed samples of fabrics will radiate from a sunburst, which is the central theme of the display. In the sunburst will be a continuous slide film projection featuring reprints of current advertisements together with copy telling a story of quality features.

In attendance—T C Keeling, general manager; J J Marshall, sales manager; R A Gopel, assistant sales manager; D E Marnon, manager, technical service department; H Gorton, assistant district sales manager, New England; R W Freeze, K Ruppenthal, J H Orr, F S Stover, R W Brewer, E K Bush and O J Pemberton, branch managers; H Goerner, N Pratt, D Fitton, S Wilson and A Brown, New England district sales representatives.

AMERICAN ASSOCIATION OF TEXTILE CHEMISTS AND COLORISTS

Lowell Technological Institute
Lowell, Mass
Booths 141-142-143

AATCC research activities will be featured at this display.

In attendance—Members of the research staff.

AMERICAN ASSOCIATION OF TEXTILE CHEMISTS AND COLORISTS ARCHIVES COMMITTEE

ARCHIVES COMMITTEE
Booth 100

The original documents, letters and papers covering the organization of the AATCC, local sections and Research Committee will be exhibited.

In attendance—Members of the Archives Committee and charter members.

AMERICAN SOCIETY FOR TESTING MATERIALS

1916 Race St
Philadelphia 3, Pa
Booth 17

The ASTM Book of Standards, numerous books of technical information, the widely-used Cotton Yarn Appearance Standards, and related publications of interest to the textile industry will be exhibited.

In attendance—Fred F Van Atta, assistant secretary and Paul J Smith, standards editor.

ATLAS ELECTRIC DEVICES CO

4114 N Ravenswood Ave
Chicago 13, Ill
Booth 144

On display for the first time will be the new Random Tumble Pilling Tester. Also on display will be the Model DMC Twin Arc Weather-Ometer, which can be used for either accelerated weathering or lightfastness testing.

In attendance—John W Lane, J E Norton and M J Babey.

BUSCHMAN PRODUCTS INC

369 Lexington Ave
New York 17, N Y
Booth 139

The product Jet-Mogenizer (homogenizer) will be featured at this exhibit. Two new advanced models will be shown in the one- and two-horsepower sizes (vertical and horizontal) with capacities from 150 to 250 gallons per hour. The new design is said to involve the following new principles in improved homogenization: (1) a unique imbalance in the rotor/stator cycling action designed as a means of multiplying centrifugal impact and inter-particle attrition, and (2) a modified mixing head which permits clearance adjustment even while the machine is running. The Jet-Mogenizer is self cleaning but, when necessary, can be taken apart in a few minutes.

In attendance—N H Buschman, president; N Lieblich, A W Bailey and J McLaughlin, sales engineers.

CELANESE CORP OF AMERICA

180 Madison Ave
New York 16, N Y
Booths 25-26

Three new dyeing and finishing processes will be highlighted: (1) a dyeing technique which, in fabrics of suitable design, will provide multicolor effects including plaids by an inexpensive one-bath piece dyeing process; (2) a new pad-steam process uniquely applicable to Arnel for the continuous dyeing of Arnel/cotton blends using cotton dyehouse procedures resulting in novel styling effects of good fastness properties at

low cost, (3) the "S" antistatic process for rendering Arnel and Arnel-containing fabrics permanently antistatic. Fabrics produced by these processes will be displayed, emphasizing styling and performance potentialities.

In attendance—C S Clutz, F Fortess, W Schoeneberg, A F Tesi and G Ward, applications and product development department; P C Duggan and B F Pimentel, customer service department.

THE CHEMSTRAND CORP

Decatur, Alabama
Booths 3-4

On exhibit will be dyed fabrics of Acrilan acrylic fiber and Chemstrand nylon. The display will incorporate a section on the Chem-nyle process for dyeing filament nylon and also depict a new method, the Chem-Acril Process for Acrilan-wool blend dyeing. The new method will show another milestone in Chemstrand's research work to improve the dyeing of chemical textile fibers. Acrilan-60 also will be on display.

CIBA COMPANY, INC

627 Greenwich St
New York 14, N Y
Booths 105-106

Featured at this display will be the Cibacron dyes for dyeing and printing and Microfix pigments for dyeing blends of synthetic fibers.

CLARK PUBLISHING CO

218 W Morehead St
Charlotte, N C
Booth 11

On display—*Textile Bulletin* and *The Knitter*.

CLEWORTH PUBLISHING CO, INC

1 River Road
Cos Cob, Conn
Booth 109

On display: *Textile Age*.

COMERIO ERCOLE OF ITALY

7 Church St
Paterson, N J
Booths 22 and 23

Films of Comerio Ercole textile machinery, including the 10-color automatic screen printing machine, will be shown. Brochures on the entire line of machinery will be distributed.

In attendance—M Vallen, sales manager; E Vallen, advertising and publicity director; E Comerio and S Comerio, factory representatives.

CUSTOM SCIENTIFIC INSTRUMENTS, INC

541 Devon St
Kearny, N J
Booth 115

The following instruments will be exhibited: model of the FRL environmental test chamber, cohesion tester, visual tear tester, flex tester and wrinkle tester.

In attendance—H J Bultman, Jr, sales manager.

DIAMOND CRYSTAL SALT CO

St Clair, Mich
Booth 121

The following products will be on display: Diamond Crystal calcium-magnesium-free type salt, Diamond Crystal granulated evaporated salt, Jefferson Island crystal rock salt (fine and coarse grades) and Brinemaster salt dissolver.

In attendance—Whittaker Lonsdale, vice president, industrial sales; C W Schornstheimer and E D Gildersleeve, associate sales managers, industrial; G F Chadwick, regional sales manager; F X O'Brien and F L Cotter, district managers.

DOW CORNING CORP

Midland, Mich
Booth 103

Examples of silicone finish characteristics on various fabrics will be displayed.

In attendance—W T Rossiter, R A Ford, R H Montgomery, R M Dameron, C E Gibson, R E Knopf, E M Eddington, H F Beutler, W D Dicome, B G Simpson and B G Pettigrew.

FABRIC RESEARCH LABORATORIES, INC

1000 Providence Highway
Dedham, Mass
Booth 128

The following will be exhibited: (1) 24″ Narrow Fabric Compactor—a production finishing machine which, in addition to preshrinking almost all types of yarns and fabrics regardless of fiber content to within acceptable merchandising limits, provides unique surface characteristics depending upon the nature of the fabric; (2) Environmental Test Chamber—a test chamber which fits all standard Instron tensile testing instruments or can be used as an oven or cold chamber in any location. With the Instrons the chamber permits use of most normal jaws and allows for testing of ten-inch samples with up to 80% rupture extension. Temperatures from —90° to +700° F can be achieved with precise control of ±1 to 2° F.

In attendance—Kenneth R Fox, associate director; Leonard N Backer, Thomas T Constantine, Francis K Burr and Arthur M Glass, senior associates.

FAIRCHILD PUBLICATIONS

7 E 12th St
New York, N Y
Booth 19

On display: *Daily News Record*.

THE FOXBORO CO

Foxboro, Mass
Booth 112

The latest developments in dyeing and finishing plant instrumentation will be shown as follows: ½-inch Magnetic Flow Meter—an accurate means of measuring the rate of use of corrosive and costly liquids such as acetic acid; larger Magnetic Flow Meters—will be represented by a 1-inch meter in actual operation on water flow, suggesting applications in the measurement of plant effluent and dye liquor flow; 13 FA d/p Cell Transmitter—for measurement and transmission of liquid level in chemical storage and mix tanks involving caustic, latex rubber and size solutions; Type 16 A Pneumatic Speed Transmitter—machine speed measurements are pneumatically transmitted for remote recording on a simple receiving instrument; Model 44 Indicating Temperature Transmitter—another pneumatic transmitter which is an important link in controlling remotely the temperatures in dye kettles, dryers and washers; pH Electrode—pH measurement of final rinse baths and water and waste treatment operations; Redox Electrode Assembly—of platinum and silver construction with Plexiglas holder to measure concentration of sodium hypochlorite for controlled make-up; Conductivity Cell—continuous measurement and control of chemical bath concentrations for scouring, carbonizing, desizing and bleaching; CycleLog Temperature Controller—used for all types of batch dyeing and bleaching machines.

In attendance—W H Ridley, manager, textile industries division; H H Michelmore, regional manager, New England; J W Gordon and J E Allen, Jr, sales engineers, New England; S C Alexander, branch manager, Charlotte; R M Green, electronic products division.

GASTON COUNTY DYEING MACHINE CO

Stanley, N C
Booth 138

On display will be a sample laboratory dyeing machine for packages, raw stock, top, cakes, muff, Barber-Colman cheeses, woven and tricot fabrics and skeins and also scale models of production units.

In attendance—Gordon Hacker, general manager; Walter Newcomb and Albert March, sales representatives.

GENERAL ELECTRIC CO

40 Federal St
West Lynn, Mass
Booth 2

The recording spectrophotometer will be on display.

THE GOODYEAR TIRE & RUBBER CO

The Goodyear Chemical Division
Akron 16, O
Booths 14 and 15

Textile applications of Chemigum, Pliovic and Pliolite (both resin and rubber type) latices will be featured. Numerous textile products will be exhibited to illustrate the use of these latices in carpet backing, non-woven fabrics, printing inks and textile finishes.

In attendance—C O McNeer, general sales manager; J E Warner, manager, coatings dept; J Platner, assistant manager, coatings dept; E W Scott, manager, sales development; J W Bear (Philadelphia), D E Neese (New York), W F Gerrow (Atlanta) and J M Hussey (Boston), district managers; F A Mather, J S Brice and A R Merritt, sales representatives; J R Houlette, advertising manager, chemical division; R J Mayfield, promotional sales representative.

THE HILTON-DAVIS CHEMICAL CO

A Division of Sterling Drug Inc
2235 Langdon Farm Road
Cincinnati 13, O
Booths 12-13

The theme of this display will tie in with the international geo-physical year with the topic "Colors of the Present and Colors for the Future." A model of the earth satellite, as well as the first stage of the rocket engine which propels the satellite, will be incorporated in the display. A special panel on Hiltazene Fast Color Base Solutions will be featured.

In attendance—Nelson S Knaggs, vice president in charge of sales. Arthur S Davis and George N Nickles, textile chemists (Cincinnati); William A Green, manager, W H Howard, textile chemist and Edward A Britton (Providence); S Y Stribling, III, manager (Greenville); Willard L Sharp (Trenton).

HOWES PUBLISHING CO

44 East 23rd St
New York 10, N Y
Booth 131

The *American Dyestuff Reporter* and the *AATCC Technical Manual and Year Book* will be on display.

In attendance—N A Johnson, C A Whitehead, M D Reeser, H A Stauderman, J A Doyle and E J Finan.

INSTRON ENGINEERING CORP

440 Hancock St
Quincy, Mass
Booth 113

On display will be the new Table Model Instron Tensile Testing Instrument with full-scale load ranges from two grams to two hundred pounds. In addition, a complete line of accessories, including the Instron Integrator will be in operation.

In attendance—Harold Hindman, president; George S Burr, vice president; L F Cedrone and L F Sheats, sales.

INSTRUMENT DEVELOPMENT LABORATORIES, INC

67 Mechanic St
Attleboro, Mass
Booth 110

On display will be: Color-Eye with abridged spectrophotometer and textile holders; modified Color-Eye for viewing large vertical surfaces; Color Tolerance Computer to correct color difference data to NBS ΔE system.

In attendance—Donald R Hall, sales-application engineer; Forrest Johnson, sales engineer; Fred H Gerring, manager, customer relations.

INTERNATIONAL SALT CO, INC

Scranton, Pa
Booth 104

100-lb bag samples of evaporated granulated and rock salt available to the textile trade will be exhibited in addition to a plastic Lixator.

In attendance—O W McKeown, W W Harris, Jr and A J Hulsebosch, sales engineers and N M Agnew, Southern development engineer.

MACBETH DAYLIGHTING CORP

PO Box 950
Newburgh, N Y
Booth 1

Latest lighting equipment for critical color matching will be shown and demonstrated.

In attendance—Robert Meeker, sales manager and Warren Reese, vice president.

McGRAW-HILL PUBLISHING CO

330 W 42nd St
New York 36, N Y
Booth 20

On display: *Textile World.*

MORTON MACHINE WORKS, INC

Columbus, Ga
Booth 134

Package, raw stock, top and beam dyeing equipment, as well as elevated temperature dyeing equipment for natural and man-made fibers, will be featured.

In attendance—Harry C Jackson, president; J R Angel, Southern sales manager; James F Notman, New England sales representative.

MORTON SALT COMPANY

120 S LaSalle St
Chicago 3, Illinois
Booth 145

This display will show various grades of salt for use in the textile industry with special emphasis on Morton's Chemical Grade 999 Salt.

NOPCO CHEMICAL CO, INC

Harrison, N J
Booth 122

Technical data reports and samples will be shown on all of Nopco's textile processing chemicals, such as detergents, warp sizing and finishing agents, fiber lubricants, wetting agents, dye assistants and coning oils.

In attendance — W E Brewer, sales manager; Larry Rossiter, district manager; George Zust, assistant manager; Ralph Schaubut, chief chemist; J Twarog, chemist; B Jones, R Fahey, A Waldron and W Dolan, technical sales representatives.

NU-LITE CORP

41 S Sixth St
Newark 7, N J
Booth 135

On exhibit will be a new development in fluorescent lighting, designed exclusively for positive color evaluation and for all color-matching jobs. Fidelity of fluorescent lighting performs critical color analyses and it is applicable where accurate color discrimination is necessary and where it is important to detect slight nuances

in off-shadings in primary and secondary colors. Also to be exhibited will be a complete line of fluorescent lights.

In attendance—S M Caravetta, president; Richard D Cioffi, vice president-sales; John J Callery, vice president; Ruth Steinhart, administrative assistant; Edward Kloski, sales manager; John N Allen, New England regional manager; William A Vandivere, Metropolitan sales manager.

NUODEX PRODUCTS CO

Division of Heyden Chemical Corp
Elizabeth, N J
Booths 119-120

Photographic montage showing scope of industrial fungicide applications, related to the Nuodex product for that use, including several new materials.

In attendance—R C Brumberger, manager, chemical industry sales; W J Stewart, director, research and development; Paul Klens, chief, Microbiological Laboratories.

OLIN MATHIESON CHEMICAL CORP

Industrial Chemicals Division
Baltimore 3, Md
Booths 119-120

Mathieson chemicals for textile processing will be featured.

ONYX OIL & CHEMICAL CO

Warren and Morris Sts
Jersey City 2, N J
Booth 114

This exhibit will be devoted to Aston, a durable antistatic agent. There will be visual demonstrations of its unique characteristics.

In attendance—F O Robitschek, president; P E MacLean, sales manager, textile division; P D Jacobs, assistant sales manager, textile division; H C Wood, New England sales manager; M Schlesinger, head, customer service; L S Goldberg, promotional representative; A E Hardy and G Thomas, New England sales representatives.

ROHM & HAAS CO

Washington Sq
Philadelphia 5, Pa
Booth 27

This exhibit will consist mainly of samples of various fabrics which have been treated with Rohm & Haas textile chemicals.

In attendance—R G Thomas, H F Lawton, H C Borghetty, H S Travis and J M Schandler.

THE TANATEX CORP

Belleville Turnpike
Kearny, N J
Booth 130

This display will consist of more than 25 swatches from Dacron-content goods, processed with Tanatex chemicals by America's foremost mills, together with samples of chemicals.

In attendance—Peter J Scott, president; Sidney M Weinstein, director of research; Bill Shive and Adolf Dabal, technical representatives.

TESTFABRICS INC

55 Vandam St
New York 13, N Y
Booth 140

A full line of samples of test fabrics used in laboratories of dyestuff manufacturers and in quality control laboratories will be exhibited. Five- and ten-gram skeins of yarns used for dyestuff standardization will be shown. The balancing of skeins to a tolerance of ±1% will be demonstrated.

In attendance—Werner Klaas, president; Marianne Blunck, demonstrator.

TEXTILE INDUSTRIES

Atlanta, Ga
Booth 127

On display: *Textile Industries.*

TEXTILE EDUCATION EXHIBIT

National Council for Textile Education
Lowell, Mass
Booths 116-117-118

On display: Promotion literature.

TURBO MACHINE CO

Smith Drum Division
Lansdale, Pa
Booth 16

Information will be available on Smith Drum package yarn dyeing, extracting and drying machines; skein dyeing machines for natural and synthetic fibers; hosiery and sweater dyeing and drying machines. A display of finished products will also be shown.

In attendance—W Kirk Wyatt, Albert Bagian and William A Fuchswanz.

UNION CARBIDE CHEMICALS CO

Division of Union Carbide Corp
30 East 42nd St
New York 17, N Y
Booths 132-133

A wide selection of chemicals to formulate anti-foaming agents, antistatic agents, anti-fume agents, conditioners, detergents and assistants, dyeing assistants, emulsifying agents and assistants, fiber synthesis and modification, finishing agents (nonresinous), lubricants, printing assistants, resin intermediates, sequestrant intermediates, shrinkage control agents, water repellents and wetting agents will be shown. "Chemicals for the Textile Industry," a booklet, will be distributed.

In attendance—Technical representatives from Boston and Newark district offices and technical specialists from New York.

U. S. TESTING CO, INC

1415 Park Ave
Hoboken, N J
Booths 125-126

Instruments to be displayed include: newly-developed knit shrinkage tester, pilling tester, gas fading chamber, detergency tester and other testing instruments. Featured will be testing and research services for the wet-processing industry.

In attendance—F P Brennan, assistant sales manager; R T McAndrew, manager, Boston; A J Kellner, manager, textile division; W H Jones, assistant manager, Boston; A C Farnham, New England sales.

WARWICK CHEMICAL CO

A Division of Sun Chemical Corp
10th St and 44th Ave
Long Island City 1, N Y
Booth 129

Featured at this display will be: Impregnole renewable and Norane durable water repellents for all fibers; Suntone pigment printing colors for textiles; Prym and Warcoset resins.

In attendance—T F Parsons, manager, converter relations; J R Gimeli, promotional representative; H C Whittemore, general manager; H B Goldstein, plant manager; A J Picciotti, general sales manager; R F Pollard, district sales manager; R G Perriello, Southern sales manager; E T McIlwain, technical representative, Suntone colors; S Nye, manager of product development; A F Costello, A N Henschel, I F Laramee and C A Lamendola, New England sales representatives.

EDWIN L WIEGAND CO

7500 Thomas Blvd
Pittsburgh 8, Pa
Booth 7

Featured will be the Chromalox electric far infrared radiant heating equipment for booster heating, drying, heat setting, singeing and prevention of migration. Equipment and control photographs will be shown.

In attendance—Leo C Pelkus, Boston sales and engineering representative and W L Thomson, manager, radiant heater division.

1957 AATCC INTERSECTIONAL CONTEST

THIS year's AATCC Intersectional Contest will be held Friday afternoon, November 15th, in the Grand Ballroom of the Statler.

The Rhode Island Section maintains a commanding lead in the number of cumulative points attained since the inception of the Contest. Assigning values of 5, 3 and 2 for the first, second and third places respectively (the same ratio in which prize money is awarded), the cumulative standing is as follows:

Rhode Island—47
New York—33
Delaware Valley—32
Northern New England—23
Piedmont—22
Washington—8
Southeastern—5

The record of winners, since the contest was inaugurated in 1940, is as follows:

1940—1st, R I; 2nd, S E; 3rd, DV
1941—1st, N Y; 2nd, DV; 3rd, S E
1942—1st, N Y; 2nd, N N E; 3rd, DV
1943—1st, DV; 2nd, N N E; 3rd, N Y
1944—1st, R I; 2nd, N N E; 3rd, N Y
1945—1st, R I; 2nd, N N E; 3rd, N Y
1946—1st, N Y; 2nd, DV; 3rd, R I
1947—1st, N N E; 2nd, DV; 3rd, N Y
1948—1st, Pied; 2nd, N N E; 3rd, DV
1949—1st, R I; 2nd, N N E; 3rd, Pied
1950—1st, Pied; 2nd, R I; 3rd, DV
1951—1st, N Y; 2nd, R I; 3rd, DV
1952—1st, R I; 2nd, DV; 3rd, N Y
1953—1st, R I; 2nd, N Y; 3rd, DV
1954—1st, Wash; 2nd, Pied; 3rd, R I
1955—1st, R I; 2nd, DV; 3rd Pied
1956—1st, Pied; 2nd, Wash; 3rd, R I

A glance at the above shows that the Rhode Island Section, in addition to leading in points, also leads in the number of first place awards, having won 7 times. Following in order are the New York Section with 4 first places; Piedmont with 3; and Delaware Valley, Northern New England, and Washington with 1 each. The Northern New England Section leads with 6 second place awards followed by Delaware Valley with 5, Rhode Island with 2, and Southeastern, New York, Piedmont and Washington with 1 each. In third place awards the Delaware Valley Section leads with 6, followed by New York with 5, Rhode Island with 3, Piedmont with 2, and Southeastern with one. The details of this year's contest follow:

Judges

Chief Justice
Richard B Stehle

Northern New England Section
John J Healy, *Judge*
Edward M Lynch, *Alternate Judge*

Delaware Valley Section
William S Sollenberger, *Judge*
F Joseph de Maria, *Alternate Judge*

Hudson-Mohawk Section
John J Hanlon, *Judge*

New York Section
Herman P Baumann, *Judge*
Adolph Dabel, *Alternate Judge*

Niagara Frontier Section
William H Leyking, *Judge*
F Vincent Mahoney, *Alternate Judge*

Piedmont Section
John C Boesch, *Judge*
V B Holland, *Alternate Judge*

South Central Section
Lloyd R Greenwood, *Judge*

Southeastern Section
Frank H Cooper, *Judge*
Stanley T Holland, Jr, *Alternate Judge*

Washington Section
Louis R Mizell, *Judge*

Mid-West Section
William Bultman, *Judge*
Joseph H Jones, *Alternate Judge*

RICHARD B STEHLE
Chief Justice

JOHN J HEALY
Judge
Northern New England Section

WILLIAM S SOLLENBERGER
Judge
Delaware Valley Section

JOHN J HANLON
Judge
Hudson-Mohawk Section

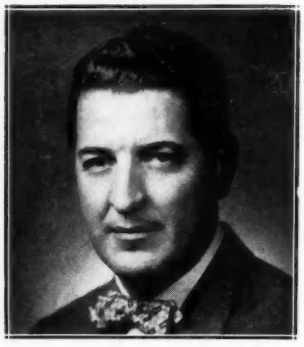
HERMAN P BAUMANN
Judge
New York Section

JOHN C BOESCH
Judge
Piedmont Section

LOUIS R MIZELL
Judge
Washington Section

WILLIAM H LEYKING
Judge
Niagara Frontier Section

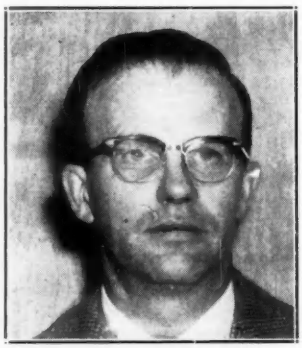
FRANK H COOPER
Judge
Southeastern Section



JOSEPH H JONES
Alternate Judge
Mid-West Section

National Committee

Jackson A Woodruff, *Chairman*
W J Crawford
J M Gould
K A Howry
T R Smith

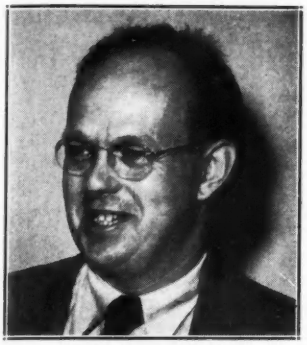


WILLIAM J CRAWFORD
Member
Intersectional Contest Committee

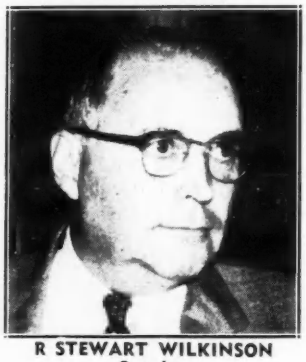
KENNETH A HOWRY
Member
Intersectional Contest Committee

JOHN M GOULD
Member
Intersectional Contest Committee

Sectional Committees



LOUIS B COOK
Chairman
Delaware Valley



R STEWART WILKINSON
Speaker
Delaware Valley

DMITRY A SHIRAEFF
Chairman
New York

CARL H BRUBAKER
Speaker
New York

Delaware Valley

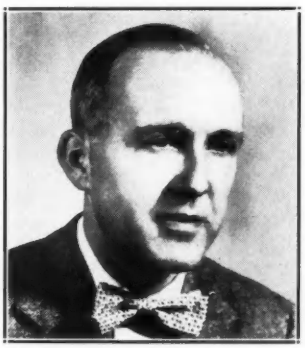
Louis B Cook, *Chairman*
R Stewart Wilkinson, *Speaker*

Donald W Robinson
Frederick W Allendorf
Isaac P Davis
Clarence A Seibert
Robert F Graupner
Richard B Stehle
Virgil D Lyon
Arthur W Etchells
Murray E Spring
Frederick V Traut
Paul L Speakman
Samuel H Loper
Percival Theel
Ernst Wm Empting
Thomas H Hart
Frank J Britz
Edwin J Grajeck
J McFarlane
Ted Devitt
Louis R Croce
Edward C Diehl

New York

Dmitry A Shiraeff, *Chairman*
Carl H Brubaker, *Speaker*

S Mooradian
B F Quigley
F C Rippner
P B Roth
H Seyferth
M G Stern
C H A Schmitt
P J Wood
I H Welch, Jr
W F Brommelsiek
P J Fynn
H E Hager
A J Kellner
P J Luck
D E Marnon
H E Millson

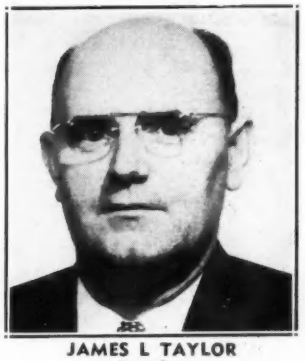


ROBERT D ROBINSON
Chairman & Speaker
Northern New England

NEAL TRUSLOW
Chairman
Piedmont

L B ARNOLD, JR
Speaker
Piedmont

PAUL SEYDEL
Chairman
Southeastern



JAMES L TAYLOR
Speaker
Southeastern

Northern New England

Robert D Robinson, *Chairman & Speaker*

Walter E Flister
B S Gesmer
F T Lense
C A Lermond
Joseph S Panto
Robert J Peirent
John P Ploubides
Frank J Rizzo
Robert E Morrison

Piedmont

Neal Truslow, *Chairman*
L B Arnold, Jr, *Speaker*

Fred Fortess
Paul B Stam
C J Dulin
E E Ewing
E E House
J V Killheffer
R G Lawrence
L S Reynolds
H A Rutherford
V S Salvin
R H Souther
W P Walker, Jr
Joanne Spangler
V B Wright

Southeastern

Paul Seydel, *Chairman*
James L Taylor, *Speaker*

Cecil Ray
Marc Shivers
W O Bozeman
W Gerrow
Howard Waddle
F X Nerney

Abstracts of Contest Papers

The Study of Lightfastness of Selected Direct Colors on Cotton, Rayon and Cotton-Rayon Blends

DELAWARE VALLEY SECTION

Studies were made of 100%-cotton fabrics using various commercial methods of preparation. The rayon blends and 100% rayon fabric were prepared using commercial methods suitable for that fabric.

Dyeings were made using selected fast-to-light direct colors such as considered satisfactory for automotive and upholstery fabric using methods recommended by the dyestuff manufacturers.

The Committee evaluated all of these dyeings and arrived at conclusions both as to the effect of method of preparation and influence of the fiber on lightfastness.

Identification of Dyestuff Classes on Natural and Synthetic Fibers

NEW YORK SECTION

The paper systematizes and presents the procedures for the identification of classes of dyes on natural and on synthetic dyes in such a way that a technician who is not experienced in the textile business can readily arrive at a correct conclusion.

The paper consists of six parts and an introduction.

Part I deals with the identification of 13 classes of dyes used on cotton and rayon. These 13 classes are divided into four analytical groups.

I—Dyes recognizable by redyeing of their bleed-off on cotton from an ammoniacal solution, or on wool, tannin-mordanted cotton, or Orlon 42 from an acetic acid bath.

II—Dyes recognizable by their property to change shade on reduction with alkaline sodium hydrosulfite and reverting back to the original shade on re-oxidation by air.

III—Dyes recognizable by their complete destruction in alkaline sodium hydrosulfite, and by inability to obtain from the bleed-off a re-dyeing on white cotton, wool, or tannin-mordanted cotton.

IV—Pigments

Part II takes up the identification of nine classes of dyes used in wool and silk dyeing. The procedures in this part are arranged in such a way that an analyst proceeds from the most easily recognizable classes down the list until his sample gives the prescribed set of reactions.

Part III gives a method for the identification of five classes used on acetate and on Arnel.

Part IV deals with identification of nine classes of dyes used on two two types of nylon. These nine classes are divided in two analytical groups based on their preferential solubilities in organic solvent or in water.

Part V gives the method for the identification of five classes of dyes used on acrylic fibers, Orlon, Acrilan and Dynel. These five classes are divided in two analytical groups using the same principle as in the case of nylon.

Part VI describes the means for identification of Dacron, and since only one class of dyes is used on this fiber, the recognition of the fiber serves also for the identification of the dye class.

An Evaluation of Test Methods for Fulled Fabrics

NORTHERN NEW ENGLAND SECTION

A series of test methods have been applied to fabrics fulled to different degrees.

It is concluded that a test method which would evaluate the quality of a fulled fabric must establish not only the amount of the felting in terms of fiber randomness but also the nature of the distribution of the felted fibers through the thickness of the fulled fabric.

The measurements of weight, thickness, compressibility, abrasion, air permeability, fluid-flow, and Beta ray penetration vary directly with the total amount of felting, but these parameters are found to be unrelated to the distribution of the felted fibers in the fabric and consequently are unrelated to the quality of fulling.

Recommendations based on this comprehensive analysis are advanced for the direction of further investigations of the measurement of fulling.

The Effect of Resin Finishes on the Lightfastness of Vat Dyes—Part II

PIEDMONT SECTION

The study of "The Effect of Resin Finishing on the Light Fastness of Vat Dyes", which the Piedmont Section undertook a year ago, has been continued. Since publication of the first paper in the November, 1956, issue of *American Dyestuff Reporter*, it has been found that the original hypothesis—that the fading effect, where it occurs, is due to the $-NCH_2OH$ grouping—is incorrect. Equally serious or more serious fading occurs where acrolein resins and epoxy resins which contain no nitrogen are used. This effect has been studied further to pin down more closely the nature of the phenomenon.

Additional vat dyes have been studied and a few more which are more sensitive to fading after resin treatment have been found.

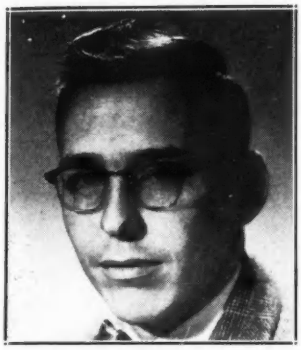
Additional catalysts have been studied.

Some experiments have been carried out to determine whether the Scwarz reaction is a factor.

A study has also been made to determine whether radiation antagonism is a factor.

Attempts have also been made to determine whether the thermosetting resins actually react with dyes to form a new molecule.

ABSTRACTS OF TECHNICAL PAPERS



Duane W Snyder

TEXTILE WASTE

DISPOSAL SYMPOSIUM

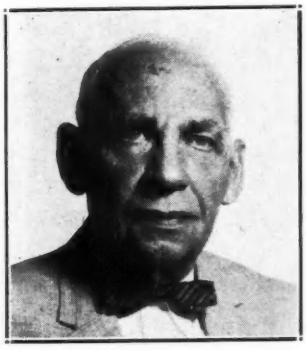
Thursday, November 14

10:00 AM — 12 NOON

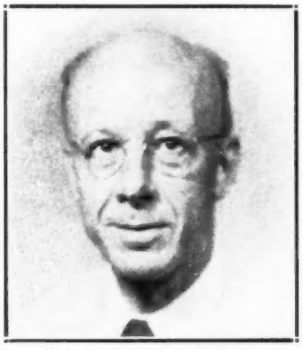
Ballroom

Duane W Snyder, *Chairman*

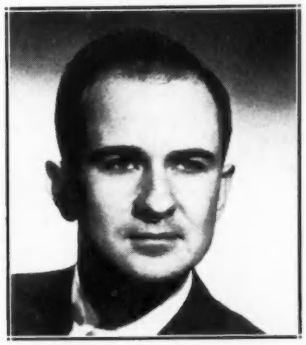
R Hobart Souther



Joseph C Knox



George G Bogren



Thomas A Alspaugh

Pollution Control of New England Interstate Waters

JOSEPH C KNOX

New England Interstate Water Pollution Control Commission

The New England Interstate Water Pollution Control Commission Administers a Compact ratified by the six New England States and New York for the control of water pollution in the interstate inland and tidal waters of the area. The Compact is based on a system of classification of waters according to proposed highest use with physical, chemical and bacteriological standards established for each class.

To assist industry, the Commission initiated an industrial waste research program in 1949. The first project was an industrial waste survey, which showed that, of the 822 plants in the area discharging untreated organic wastes to the waters, 398 were textile mills. Accordingly special emphasis has been placed throughout the program on textile mill wastes including cotton, wool and synthetic fibers.

Disposal of Combined Textile Finishing Wastes and Domestic Sewage

GEORGE G BOGREN

Weston & Sampson, Consulting Engineers

Textile finishing wastes vary widely with the type of chemicals employed in the finishing processes, both from industry to industry, and from hour to hour and day to day in any one finishing plant.

For this reason, wastes treatment by chemical coagulation and subsidence is often impossible in practice, although laboratory pilot-plant studies run with catch samples at tiny rates of flow give excellent results. Biological treatment will handle the wastes of varying character, particularly if hydroxide alkalinity is neutralized.

Results of operation of the wastes treatment plant of the Sayles Finishing Plants, Inc, Saylesville, RI, handling combined cotton finishing wastes and domestic sewage on high and low rate trickling filters, will be given. Neutralization of caustic alkalinity is shown to increase the efficiency of trickling filters.

Treatment of Mixtures of Textile Wastes and Domestic Sewage IV. Research in Various Methods of Treatment

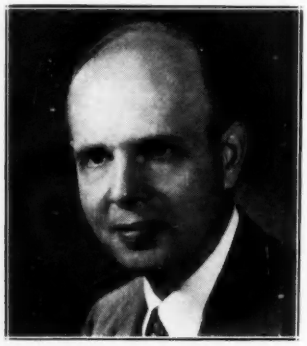
R HOBART SOUTHER and THOMAS A ALSPAUGH

Cone Mills Corp

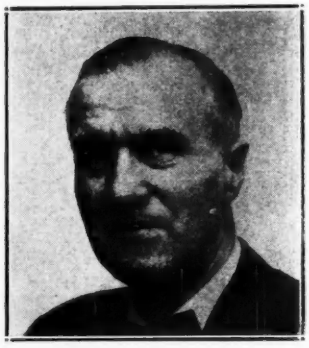
The treatment of textile waste has long been considered a difficult problem due to variability, strength, and alkaline nature of the waste. Many consultants in the past have stated that combined treatment with sewage was not feasible without expensive chemical pretreatment, and therefore, separate treatment recommendations have prevailed.

This paper is a discussion of research at Cone Mills to evaluate combined treatment against separate treatment with and without pretreatment. The methods investigated include physical, chemical and biological processes, particularly the effect of lagooning as an aid to waste treatment. Conclusions indicate that biological treatment of combined textile waste and domestic sewage without chemical pretreatment is practical and economical. Lagooning can be expected to reduce both initial cost and operating expenses.

GENERAL TECHNICAL SESSION
Thursday, November 14 —— 1:25 — 4:30 PM —— Ballroom
Alfred N Henschel, *Chairman*

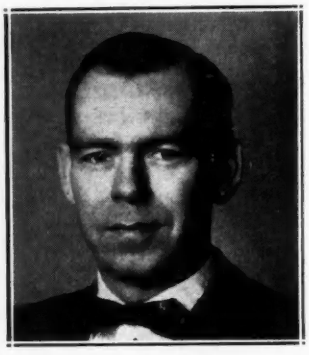


Alfred N Henschel



George Thomson

W R Steele



Lester D Berger

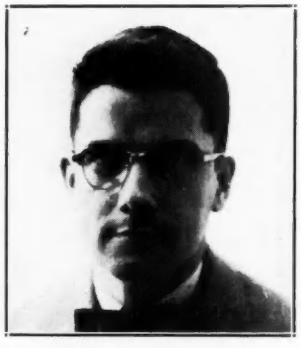
Textile Processing Chemicals

LESTER D BERGER, JR
Fine Chemicals Div
Union Carbide Chemicals Co

"Textile Processing Chemicals" are chemicals consumed in the processing, dyeing and finishing of fibers into textile goods which cannot be identified to any appreciable extent on the finished textile article.

Progress in textile technology in recent years has brought about major growth and diversification in the consumption of textile processing chemicals, sales of which amounted to $390 million in 1955.

An analysis of the various categories of textile processing chemicals and their relative economic importance will be presented. The future growth of textile processing chemicals will be discussed, emphasizing the increasing importance of synthetic organic chemicals to the solution of textile processing problems. Synthetic warp sizes, solvent dyeing processes and antistatic agents are examples of recent textile processing chemical developments.



Charles A Lermond

What an Ultraviolet Reflectance Curve Can Tell About a Textile Material

GEORGE THOMSON, CHARLES A LERMOND and RUTH A KENNEY
Fabric Research Laboratories, Inc

The reflectance of ultraviolet light can be measured easily and quickly and offers the textile chemist an effective tool in determining the type and history of a textile material. To date, little or no attention appears to have been given to this method of obtaining information.

The ultraviolet reflectance curves of undyed fibers or fabrics are characteristically different, dependent on the types of components. Cellulosics, proteins and the various types of synthetics can be distinguished from one another as, for example, type 6 versus type 66 nylon.

The presence of optical bleaches, dulling agents and other finishes has a marked effect on the basic curve of the original material.

Analysis of these reflectance curves should be of assistance in selecting materials for protecting agents against sunlight.

S M Rogers

Solvay Activated Hydrogen Peroxide Bleaching Process

W R STEELE and S M ROGERS
Solvay Process Div
Allied Chemical & Dye Corp

Bleaching of yarn and cloth is not simply a matter of improving whiteness. It involves other features which quite often are as important as whiteness. Cotton can be bleached to a high degree of whiteness by drastic treatment, but good quality material should have low "fluidity," indicative of minimum degradation. Absorbency is another important property, determining suitability for particular uses; for example, it is important in material which is to be dyed since dyeability is directly influenced by absorbency Another feature is the silicate content of the finished material. The presence of silicate in cotton is objectionable. Unfortunately, in conventional hydrogen peroxide bleaching operations, there is a permanent absorption of silicate from the peroxide solution. As a matter of fact, in hydrogen peroxide bleaching operations, highly purified water such as filtered softened water usually has

to be employed for washing to prevent pickup of objectionable hardness salts and metals. Filtration and softening of water adds considerably to the over-all cost of bleaching.

The Solvay Activated Peroxide Bleaching Process saves money and improves quality. Consumption of peroxide and additives can be reduced from 25 to 75%, depending on the properties of the cotton at the time of bleaching. Assuming 50% reduction, and an annual consumption of 20 (4000-gallon) cars of 35% hydrogen peroxide, the annual savings in chemicals, exclusive of water softening, amounts to as much as $72,000. Extra equipment should not cost more than $10,000.

Brightness, brightness retention, purity, absorbency, and dyeability are all improved. Ash and metal contents are reduced. Moderately hard water can be used for washing without reduction of absorbency as quite often happens in regular peroxide bleaching. Metal content, particularly silica, is reduced. The method does not harm the cotton.

The distinctive step of the process is activation or prebleaching with sodium hypochlorite, usually after caustic purification, followed *without washing* by bleaching for shortened periods of time with substantially reduced quantities of hydrogen peroxide and additives. The process is in successful, full-scale operation following extensive laboratory and pilot plant testing.

Solvay has applied for patents, but plans to offer the process to the textile industry on a royalty-free basis.

The Colorimetric Properties of Bleached Cotton

E S SHANLEY
Arthur D Little, Inc
Cambridge, Mass

The Subcommittee on Bleaching is conducting a continuing program on

E S Shanley

specifications for bleached cotton fabrics. This is a report on the studies aimed at providing numerical specifications for the visual appearance of the cloth.

Samples of typical white cotton fabrics were collected both at the white bin stage and after bleaching and finishing. Spectophotometric examinations of all samples were carried out in three different laboratories. The results were converted to CIE co-ordinants for comparison with visual grading of the samples. The three different spectrophotometers proved to be in only fair agreement with each other. All failed to distinguish the smallest differences visible to the eye. On the other hand, spectrophotometry proved quite effective in analyzing the nature of the color differences between samples. The permanent record of the color attributes also proved useful in studying color stability. Stability was found to be quite poor, blued samples especially being subject to substantial fading after one or two months even in the dark.

These results constitute a start toward the eventual development of numerical specifications for the color of bleached cottons. What is needed is a photometer of lower cost and higher sensitivity. Current developments in instrumentation warrant the hope that such a device may be forthcoming.

Richard Hosmer

Recent Developments in Electronic Instruments for Textile Processing

RICHARD HOSMER
The Foxboro Co
Foxboro, Mass

Electronic instruments have become firmly established as devices for the measurement of temperature and pressure; offering certain advantages over conventional mechanical types long used for these variables. Pros and cons of the two types must be weighed before making a selection.

Such analytical measurements as electrolytic conductivity, pH oxidation, reduction potential and dielectric determination are made possible by electronic instruments and have extended to the process measurements formerly confined to the laboratory.

More recent developments include flow measurement by magnetic principles—a liquid generates a voltage which is proportional to its flow velocity. Electronic transmitters and controllers which perform the function of pneumatic systems but which operate with the speed of electricity and which eliminate the need for instrument air, are also being developed.

New techniques, such as chromotography, for gas analysis measurements show great promise in this field.

While new electronic developments are frequently alluring, their selection must, as always, be based on probable benefits to the user.

ALL TECHNICAL PAPERS PRESENTED AT THE 1957 CONVENTION WILL BE PUBLISHED EXCLUSIVELY IN FUTURE ISSUES OF AMERICAN DYESTUFF REPORTER

"A GLANCE INTO THE FUTURE"
Friday, November 15 ——— 8:55 AM — 12:00 Noon ——— Ballroom
J Edward Lynn, *Chairman*

Raymond Stevens

Herman F Mark

Economic Facts and Figures

RAYMOND STEVENS
Arthur D Little, Inc

Textile concerns will be faced with rigorous competition and narrow profit margins in the next few years. The textile industry is faced with rising wage rates due to increased unionization and the general rise in level of wages in the economy. Raw material prices have risen as a result of government price supports, and foreign competition has increased as import duties have been lowered.

During the war years capacity was expanded to meet increased demand, and during peacetime there is a process of readjustment of demand. This readjustment period has been intensified by improvements in equipment and changes in the useful life of garments and the purchasing habits of consumers. There appears to be no immediate prospect of industry-wide relief based on demand overtaking capacity.

In the near future the number of companies in the field will be reduced, and the survivors will be those who can combine technological skill with sound business practices.

High Polymer Prospects

HERMAN F MARK

Polytechnic Institute of

Brooklyn

(No Abstract Available)

Fabric Trends

WALTER J HAMBURGER
Fabric Research Laboratories, Inc
Dedham, Mass

Much attention is given to new developments within the textile industry, in fibers, techniques for handling them, and ways to modify and decorate fabrics made from them. The industry is not fully alerted, however, to two circumstances external to the industry, which have far greater import.

1) For the first time, textile products are in serious competition with a range of alternate materials designed for the same functions and markets.
2) Other commodities have taken the ascendancy in consumer interest.

What the fabric trends of the future will be depends on how fully the industry responds to these external challenges.

The contest will be on many fronts, but with three major elements of strategy: economics, performance, and promotion.

The major *economic* opportunity lies in freeing textile staples from the excess burden of labor costs compared to competing materials. The big step must be taken to streamlined, automated systems.

As to the contest on *performance*, there may be major readjustments along new divisional lines, and perhaps abandonment of textiles in some applications where relative merits indicate choice of other materials.

These two elements indicate a move away from today's "compromise" fabrics, which are priced on craft rather than automated systems, and yet do no specific job particularly well.

Promotion depends upon how well the industry will learn to play the game. It has much to learn in dealing with the consuming public and industries, in programming for sustained interest, and in policing itself to stay in public repute.

If the industry measures up to the challenge, we may see:

a) Fabrics soundly engineered and balanced for fiber, texture, and finish, and sold as a complete product and not according to fiber content or proprietary finish.
b) Orderly but at times radical conversion of whole lines of products in long-range programming for planned obsolescence and stimulation of interest.
c) Emphasis on quality and reliability, rather than mere price or simulation of products of real merit.

Fabric trends may continue as a random turnover of "change for the sake of change", and in abortive attempts at new opportunities or at holding traditional positions.

We can all hope and strive, however, for fabric trends that make good sense; playing price to the limit where that is the main issue; playing performance to the limit where textile characteristics have inherent advantages; and aggressively planning and promoting our products along lines of maximum appeal, interest and value. We all have much to learn of all these strategies.

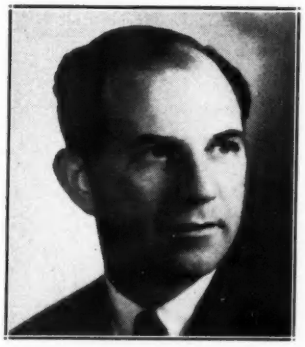
Chemical Trends in the Textile Industry

MILTON HARRIS
The Gillette Co

The textile industry is currently consuming about 2.3 billion dollars worth of chemicals annually, and there is every indication that this volume will increase in future years. Indeed, it has been stated frequently that the field of textiles constitutes the most promising area for expansion of the chemical industry in the forthcoming years.

In spite of such bright prospects, the problems and competition in the development of these markets are great, and success will depend in an overwhelming way on the efforts and skill of the chemical industry itself. A principal reason for this is found in the fact that the textile industry is primarily a mechanical industry whose predominant skill is in the area of construction. While it recognizes the need and importance of chemical products and processes, it shows little loyalty to any of these.

For the most part, the chemical industry has already assumed the responsibility for leadership in this area. Nonetheless, progress could be greatly accelerated by closer cooperation and coordination between these two industries.



Milton Harris

Nuclear Energy—A New Tool for the Textile Industry

HARRY A RUTHERFORD
School of Textiles
North Carolina State College

It has become popular during the last several years to speculate concerning the part that atomic energy might play in the future of various industries, particularly when such energy in large quantities is available at reasonable cost. The experimental application of atomic energy has been fruitful in several industries, notably in food preservation, but as yet nothing of any great interest has developed in the field of textiles.

The development of new products for the textile industry through radiation chemistry, at least in the near future, appears unlikely. However, it is not impossible that polymerization reactions initiated by high-energy radiation may some day produce fiber-forming materials of unusual interest. The application of radiochemical techniques as a means of studying or solving problems peculiar to the textile industry appears to be of the most immediate interest. Such techniques might apply to plant process control, analytical problems, and to problems where tracers might be used. Several examples of these applications will be given.

"TEXTILE PROCESSING"

Saturday, November 16 ——— 8:55 AM — 12:30 PM ——— Ballroom

Carlyle Harmon, *Chairman*

Automation with Process Instruments

WALTER H RIDLEY
The Foxboro Co

Company directors are vitally interested in automation, and always have been. Modern process instruments represent automation in the best sense of the word. There is, today, a great variety of new instrument automation to aid the textile industries in doing a better and more economical job. However, actual or operating management and their staffs do not always have the time, inclination, or the money to give these new tools proper evaluation.

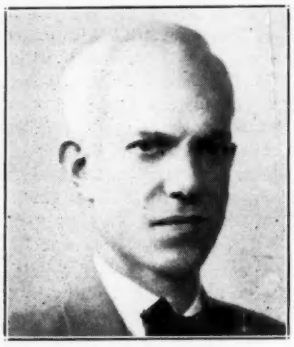
As a result, the average mill uses only about one-third as much automation as it should. The success of this current one-third is hindered by the lack of proper maintenance, and by the lack of interest on the part of the operating personnel and their supervisors. This despite the fact that investments in instrument automation result in returns of improved quality and increased efficiency that are phenomenal!

Instrument automation is frequently overlooked or kept to a bare minimum when a mill is considering new machinery. This is not so in other industries. In fact, automation is so important that it is considered separately from the machinery. The success of some of the newer textile processes depends completely on automation of the latest type.

Walter H Ridley

What can be done to help improve this situation? The following suggestions outline the major steps which should be taken.

1) Recognize the importance of industrial instruments by removing them from the "gadget" classification.
2) Take from earnings each year *before* dividends, a budgeted amount to improve efficiency through instrumentation.
3) Place responsibility in one qualified engineer to check and approve *all* instrument requisitions.
4) Analyze carefully all instrument details which are included with new machinery specifications.
5) Keep records of increased efficiency to substantiate the continuing automation program.
6) Provide for proper maintenance and preventive maintenance.
7) Make sure that, once installed, the instruments are properly operated and fully utilized.
8) Include in estimate of total installed cost instrument training for operating personnel.



Emil C Hansen

Scouring Grease Wools Neutral

EMIL C HANSEN
Antara Chemicals Div
General Aniline & Film Corp

The problems involved in scouring raw wool will be discussed and recent developments in this field reviewed. The neutral scouring process for raw wool is based on the use of nonionic detergents. Laboratory tests will be presented to show that optimum detergency is exhibited by a nonylphenol base nonionic containing 10.5 mols of ethylene oxide.

Several practical plant processes will be given for three, four and five bowl scouring ranges. The neutral scouring process gives good results for washing both coarse and fine wools and millions of pounds of grease wools have been successfully scoured by this method. Wools scoured by the neutral process are softer, whiter, and more lofty than wools scoured by conventional alkaline processes.

Important aspects of the neutral scouring process will be discussed and current developments in wool scouring noted.

Control of Wool-fabric Shrinkage with Polyamide-epoxide Resin Finishes

C E PARDO and R A O'CONNELL
Western Regional Research Laboratory

This paper describes conditions for effective use of polyamide-epoxide resin mixtures for control of felting shrinkage of wool fabrics. Relatively simple treatments have been found to impart desirable properties including shrink resistance to repeated laundering and drycleaning. The relationship of various fabric properties (including resistance to tear strength, wrinkle recovery, flexural rigidity, and felting shrinkage) to the concentration and relative proportion of the resins and to the conditions of curing will be discussed.

C E Pardo

Emery I Valko

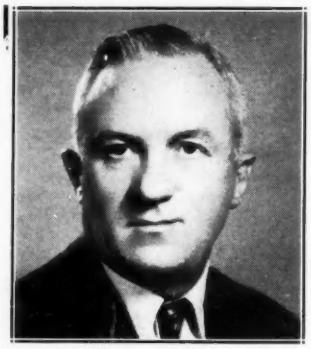
Giuliana C Tesoro

Elimination of Static Electricity from Textiles by Chemical Finishing

EMERY I VALKO and GIULIANA C TESORO
Onyx Oil & Chemical Co

The mechanism of protection against static accumulation will be described in terms of chemical structure of finishes and processing aids. Electrical conductance of antistatic agents is related to their capacity to ionize and to attract water. The dependence of the electrical resistance of the finished textiles on the construction of the fabric and on the nature of the fiber will be illustrated.

An economical multi-purpose finishing treatment based on the combination of antistatic protection with pigment padding will be described.



Osborne C Bacon

Effect of Laundering on Chlorine Retention and Crease Resistance of Cotton Finished with Dimethylol Ethylene Urea

OSBORN C BACON, J EDWARD SMITH and LEHMAN E HUGHES
Technical Laboratory
Organic Chemicals Department
E I du Pont de Nemours & Co, Inc

A general discussion of the problem of damage from chlorine retention from crease-resistant finishes on cotton fabrics will be presented. Data on crease resistance, tensile strength, fabric discoloration, and chlorine retention obtained with dimethylol ethylene urea finishes on cotton under different conditions of application will be given. The application conditions are varied with respect to curing temperature, catalyst employed and by inclusion and omission of a neutralizing wash after curing. The curing time is held constant at one minute to approximate high production speeds in practice. The results include data on chlorine retention damage before and after 10 launderings in soap and soda ash at 140° F.

Soiling Studies on Resin-treated Cotton Fabrics

ROBERT M REINHARDT, LAURENCE W MAZZENO, JR, RUSSELL M H KULLMAN, HARRY B MOORE, and J DAVID REID
Southern Regional Research Laboratory

Complaint has been made by a number of observers that some resin-treated textiles are highly susceptible to wet-soiling during laundering. In the course of research on "wash-and-wear" cottons, tendency toward wet-soiling has been studied. Conditions under which wet-soiling occurs have been determined and various components of a number of commercial formulations have been examined to determine causes of soiling. A simple laboratory test for wet-

Robert M Reinhardt

E James Stavrakas

M M Platt

soiling has been developed using a Launder-Ometer with soap solution as the detergent and carbon black as the soiling agent under conditions approximating those encountered in commercial laundering. The effect of variables on soiling have been determined. Causes of soiling will be outlined and the effects illustrated with photographs, electron micrographs, tables and graphs.

Effect of Finishing Treatments on Tear Strength of Cotton Fabrics

E JAMES STAVRAKAS and MILTON M PLATT
Fabric Research Laboratories, Inc
Dedham, Mass

The tear strength of cotton textiles is of major importance in most types of apparel textiles, and it is generally stated that the tear strength of resin treated fabrics is substantially lower than that for untreated fabrics. It was the purpose of this work to determine the factors which contribute to this loss in tear strength.

Since a cotton fabric is subjected to a number of preparatory finishing treatments, prior to the resin treatment, which alter its geometry (ends and picks per inch, yarn crimp, and crimp balance), and change the frictional characteristics of the surface of the cotton fibers, it was deemed pertinent to the goal of this work to evaluate the effect of each of the finishing treatments on the tear strength of cotton.

Thus, the effects on tear strength of cotton fabrics of desizing, scouring, bleaching and dyeing, and resin treatment have been studied and related to changes in fabric geometry, and to yarn and fiber properties.

"TEXTILE DYEING"

Saturday, November 16 — 1:25 — 4:00 PM — Bay State Room

C L Zimmerman, *Chairman*

The Mechanism of Dyeing Orlon 42

T VOGEL and J M A de BRUYNE
American Cyanamid Co
and
CHARLES L ZIMMERMAN
Dan River Mills

The theory that Orlon 42 is dyed on specific anionic sites by cationic dyes is supported by the results of equilibrium dyeing studies. The relative affinity measurements showed that previously available dyes have very high affinity for Orlon 42. This results in poor leveling properties, in agreement with the behavior of other classes of dye on other fibers. However, these high affinities are also associated with poor rates of exhaustion, and microscopical cross-sections show incomplete penetration of the dye into the fiber.

A new class of cationic dyes, which have lower affinity and give level dyeings on Orlon 42, has also been

C L Zimmerman

studied. Dyeing rate curves indicate excellent rates of exhaustion and rapid attainment of equilibrium. Microscopical cross-sections show complete penetration within normal dyeing times. Lightfastness ratings are 80 hours or better.

Dyeing of Zefran and Zefran Blends

A S MESSER
The Dow Chemical Co

Zefran is a white nitrile alloy fiber, which produces a worsted-type hand in finished fabric.

The ease as well as the versatility in dyeing is seen in the ability of Zefran to dye with the cellulosic dyes, such as vats, soluble vats, naphthols, sulfurs and aftertreated directs as well as the neutral premetalized for wool. The procedures for application closely approximate those used for the natural fibers; commercial runs as well as rate and adsorption studies bear this out. For the most part unions of Zefran with the cellulosics or wool are carried out as a one-bath method in normal dyeing cycles; through dye selection, temperature regulation and reserving agents. Certain particular areas in the dyeing of

Zefran blends have not been completely worked out to perform the necessary job.

Zefran and Zefran cellulosic blends can be dyed continuously in the pad-steam or Williams units; minimum concentration of caustic soda is recommended. Printing of Zefran and Zefran blends is possible with vats, soluble vats and rapidogens.

The Dyeing of Filament Nylon with Acid Dyes

J A BITTLES, J A BROOKS, J J IANNARONE, JR, and H P LANDERL
E I du Pont de Nemours & Co, Inc

The paper compares the dyeing procedures available for the coloration of filament nylon piece goods with acid dyes. Fabrics made from filament nylon yarns frequently contain non-uniformities which are apparent as streaks after dyeing. Most fabrics do not show these streaks when dyed with disperse dyes, but, in order to improve the fastness properties, it is desirable to use acid dyes. Acid dyes will frequently dye these fabrics very streaky unless the dyes are carefully selected and the proper procedure used in their application. Four aqueous procedures for applying selected acid dyes to filament nylon are discussed. These are, solvent-assisted dyeing, cationic-agent-assisted dyeing, anionic-agent-assisted dyeing and high-temperature dyeing. The latter three procedures will be covered in detail.

Solvent-assisted dyeing is of little commercial importance except in special cases because of the expense and/or hazards involved.

The newest technique for dyeing nylon levelly with acid dyes involves the addition of a cationic-active agent to the dyebath. With this procedure dyeings with excellent levelness can be obtained at temperatures below the boil if carefully selected dyes are used. The older anionic-agent-assisted bath is less effective in covering streaks at temperatures below the boil, but as the temperature increases the effectiveness of the anionic system in covering the streaks also increases. In dyeing at atmospheric pressure, the cationic-assisted system appears to be the better process because in actual practice a true boil is seldom reached. In addition, when making deeper shades, the reserving action of the cationic agent is less severe than that of the anionic agent.

At temperatures above the boil (235-250° F) both the anionic- and cationic-assisted systems produce good levelness. However, under these conditions the anionic procedure is somewhat better because of the increased transfer obtained.

All of these procedures have their limitations because only selected dyes can be used. These dyes are not necessarily those which give the best fastness but they are significantly better than disperse dyes. In most cases the wetfastness can be improved still further with aftertreatments.

H P Landerl

Peter J Scott

Dorel Marian

Evaluation of Carriers for Dacron Dyeing

PETER J SCOTT
The Tanatex Corp

Some of the newer synthetics, such as Dacron, require a carrier when dyed in open equipment. There are a number of carriers on the market. To be usable, they all must meet certain requirements in the following areas:

1) Toxicity
2) Carrier spotting
3) Volatility
4) Simple application procedure
5) Effect on lightfastness
6) Effect on other fibers present.

The properties of a carrier with respect to the above are easily evaluated, but the most important property of a carrier is to carry dyestuff from the dyebath onto the fiber.

The main subject of this paper is the development of a simple method to determine the actual color yields obtainable from the same dyestuffs, with two or more carriers to be investigated. A certain shade is obtained with a given carrier and dyestuff combination. This shade is matched with another carrier and varying amounts of the same dyestuff combination. The combined cost of carrier and dyestuff is then calculated for both dyeings. The difference provides a measurement of the effectiveness of the carriers investigated. The method is applicable both in the plant and the laboratory.

A tentative method to determine the optimum amount of carrier for a given dyestuff combination will be described.

Some Considerations about the Azoic Insoluble Dyes in Printing

DOREL MARIAN
Compagnie Francaise des Matieres Colorantes

A brief history of the evolution of this problem will be presented starting with the beta-naphthol up to the mixtures of naphthols and specially stabilized salts. A chemical explanation of each step will be given.

A practical part of the paper will be concerned with the printing problems of azoic dyes, alone and associated with other classes of colors.

The influence of steam (neutral or acid) and the speed of the treatment will be explained. Other means of fixation for these dyes will be presented.

Finally, economical considerations will be shown by graphics for fixing the interesting limits in the use of azoic dyes in printing.

P J WOOD TO BE AWARDED 14th OLNEY MEDAL

PJ WOOD, technical director of Royce Chemical Co and past president of AATCC, will receive the Association's highest honor, the Olney Medal, at the 1957 Olney Medal Award Luncheon. The Luncheon, to be held on Friday, November 15 at 12:30 PM in the Grand Ballroom, will be one of the outstanding ceremonies of the Thirty-sixth National Convention.

Known professionally and to his many friends simply by the initials "P J," Mr Wood has had a long and distinguished career in business, as a professional man, and in various posts of service in community efforts.

Mr Wood, a charter member of AATCC, served as president in 1931 and 1932. By virtue of that service he is a permanent member of the group's governing Council. He is presently chairman of the AATCC Analytical Methods Committee, and a member of several other important committees, including Appropriations, Archives, and Technical Committee on Research.

A summary of the Medalist's career, accomplishments and personal background will be made at the 1957 Olney Medal Award Luncheon by a close professional friend of the winner. This testimonial address will be made for Mr Wood by Milton Harris, director of research for the Gillette Co, and until recently president of Harris Research Laboratories, Washington.

Born June 21, 1880, in Leeds, England, Mr Wood was educated in English schools, receiving a diploma in chemistry and dyeing in 1898 from the University of Leeds.

Following graduation from Leeds, he served three years as an apprentice with William Grandage & Co, Bradford, England, and then returned to the University of Leeds as lecturer in the Department of Tinctorial Chemistry and Dyeing, for a period of two years.

The Medalist at work in the laboratory

The Medalist at the time of his AATCC presidency (1931-2)

The Medalist during his first year with Oriental Silk Printing Co (1909)

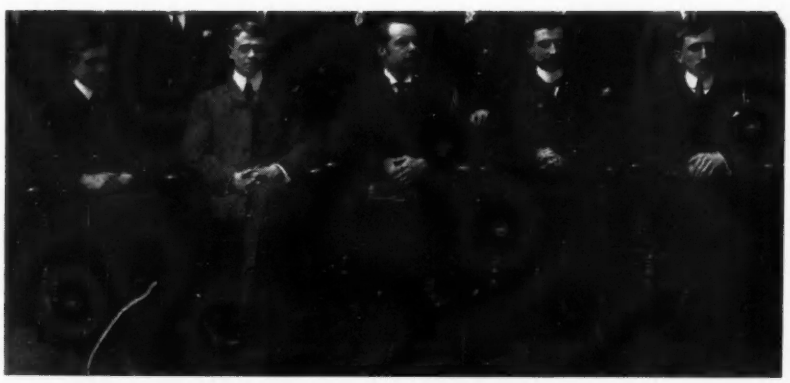
He then came to the United States, and from 1903-1906 was chief chemist at American Silk Dyeing and Finishing Co, Hawthorne, N J, following which he became superintendent of Peerless Finishing Co, Nyack, N Y, until 1908.

From 1908 until 1934, he was vice-president and manager of Oriental Silk Printing Co, Haledon, NJ. After two years consulting work, he joined Royce Chemical Co, Carlton Hill, N J, as technical director, his present position.

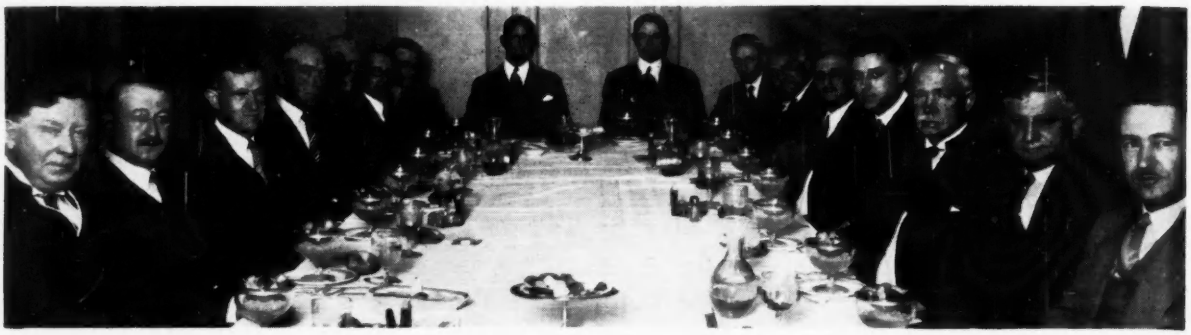
In addition to his AATCC past presidency and charter membership, Mr Wood is also a life member of the Chemists Club, New York; fellow of the American Institute of Chemists; fellow of the Textile Institute (England); and fellow of the American Association for the Advancement of Science.

He has been secretary of the Passaic Valley Subsection of the American Chemical Society, and secretary of the Colorists Club for 15 years.

His service in civic and beneficial causes is extensive. He was Health Commissioner of the City of Paterson, N J, for five years; member of the board of managers of Passaic County Tuberculosis Sanatorium for eight years; president and director of the Haledon National Bank, for nine years; director of the Alexander



The Medalist (second from left) is shown seated before the Class of the Tinctorial Chemistry and Dyeing Dept of the University of Leeds in 1902. At the time, Mr. Wood was an assistant lecturer of dyeing. At Mr Wood's right is Harry E Kenworthy. At his left are Arthur G Perkin, second son of Sir William H Perkin, with whom Mr Wood did research work; Arthur G Green, professor of tinctorial chemistry and dyeing at Leeds, discoverer of Primuline and the Stilbene colors; and A B Steven, assistant lecturer of dyeing.



Board of directors, Haledon National Bank, at the Third Anniversary meeting, held May 8, 1929 at the Alexander Hamilton Hotel, Paterson, NJ. (Mr. Wood seated at the head of the table, eighth from right)

1902—Wiesbaden, Germany

The Medalist and his sister, Emily, at a tender age

Oriental Silk Printing Company Band—organized June 1914. (Mr Wood in the center, back row)

Hamilton Garage; member of the board of managers, Paterson General Hospital for 19 years; churchwarden of the Trinity Protestant Episcopal Church, Paterson, for 30 years; and treasurer of the Passaic County Tuberculosis and Health Association, for 25 years.

Mr Wood has had published 30 technical papers in *American Dyestuff Reporter*, including a number of translations from the French, German and Italian. He has also published papers and articles in a dozen other publications.

Mr Wood is married to the former Margaret May Davidson. They reside at 21 Emerson Avenue, Paterson, N J.

The Olney Medal is a heavy cast piece bearing a likeness of Dr Louis Atwell Olney, founder of the AATCC, on the front, and a simple inscription on the reverse side. The award is endowed by Howes Publishing Co, Inc, New York, and is awarded by an AATCC committee to any citizen of the USA as recognition for "outstanding achievement in the field of textile chemistry, including the development of chemical agents or chemical processes used in the manufacture of textiles, or methods for their evaluation."

Details of published works and professional qualifications of those proposed each year for the medal are usually contained in nominating briefs delivered to the Awards Committee. This Committee then considers those nominated and makes a final choice.

Under rules agreed to by the Association and Howes Publishing Co, Inc, the award must be made by unanimous decision of the committee of five, which includes: The Association president (ex-officio); a member of the faculty of an educational institution awarding chemical degrees; an employee of a concern manufacturing chemical products used in textile wet processing; an employee of a concern manufacturing textiles; a member at large of the Association.

Previous winners of the Olney Medal are:

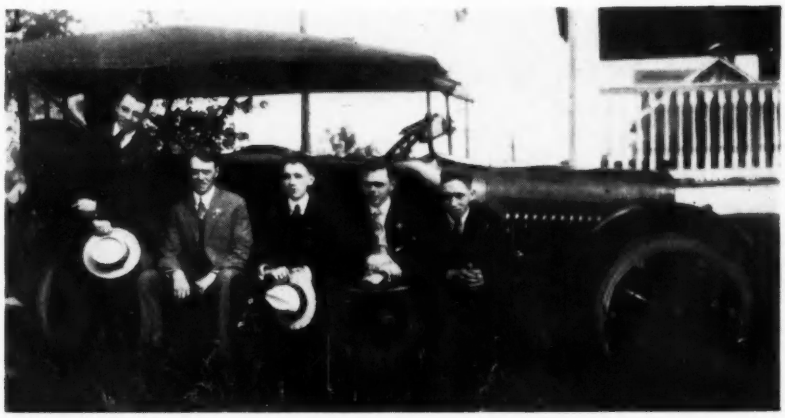
1944—Louis A Olney
1945—Milton Harris
1946—William H Cady
1947—Edward R Schwarz
1948—Harold M Chase
1949—Charles A Seibert
1950—George L Royer
1951—Raymond W Jacoby
1952—Werner von Bergen
1953—Roland E Derby
1954—William D Appel
1955—Miles A Dahlen
1956—Walter J Hamburger

The Medalist as a student

The Medalist—The Musician

Perhaps not too clear in the photo, but that's a Van Dyke!

From the Sheepscar Studio, 194 North St and at 82 Woodhouse Lane, Corner of Queen Square, Leeds



The Medalist (2nd from left) and Sunday school class

THE OLNEY MEDAL

A COMPILATION OF PUBLISHED PAPERS BY P J WOOD

American Dyestuff Reporter

ORIGINAL

"The Art of Textile Printing"—Feb 6, 1928 (p85)

Address before NNE Section—March 30, 1931 (p199)

"Fluorescence—Fluorescent Intermediates and Synthetic Organic Colors"—May 31, 1937 (p291)

"Preparation, Printing and Finishing of Rayons"—May 30, 1938 (p299)

"Remarks at 1938 Annual Banquet"—March 6, 1939 (p122)

"Recent Developments in Textile Printing"—Sept 4, 1939 (p493)

"Organizing a Dyeing and Finishing Plant for Synthetic Piece Goods"—Dec 25, 1939 (p746)

"Recent Developments in Textile Printing"—Oct 27, 1941 (p576)

"History of the New York Section"—Dec 2, 1946 (p596)

"A Quarter of a Century of Textile Printing"—Dec 2, 1946 (p655)

"Historical Sketch of the AATCC"—Feb 24, 1947 (p79)

"Enzymes in Textile Processing"—June 30, 1947 (p355)

"Harold M Chase, the Scientist"—April 4, 1949 (p301)

"Highlights of the Past Year"—Dec 11, 1950 (p869)

"Your Host, The New York Section"—Oct 1, 1951 (p622)

"The Wet Processing Industry in the New York Area"—Oct 1, 1951 (p645)

"Continuous Stripping of Carpet-Yarn Waste"—(Wood, P J and Duffy, E T)—Oct 15, 1951 (p675)

"A Proposed Method of Open-Width Bleaching for Cotton Piece Goods"—May 7, 1956 (p277)

"Highlights of the Past Year"—1951-1956 (Processing Review Numbers)

TRANSLATIONS FROM THE FRENCH

"Studies in Detergent Power"—August 25, 1947 (p457)—Sisley, J P

"Determination of the Industrial Value of Detergents"—Oct 4, 1948 (p635)—Sisley, J P

"Nonionic Compounds, Their Employment in the Textile Industry"—July 11, 1949 (p513)—Sisley, J P

"A New Method of Determination of Wetting Power"—(Reutenauer, G, Sisley, J P and Dupin, S)—Jan 7, 1952 (p25)

"The Physical Action of Surface-Active Agents in the Mechanism of Detergency"—(Rosano, H L and Weill, M)—April 13, 1953 (p227)

TRANSLATIONS FROM THE GERMAN

"The Evaluation of Enzymatic Desizing Agents" by E Schubert, Swiss Ferment Co, Ltd, Basle; from *Textile Rundschau;* published in *Am Dyestuff Reptr* of March 20, 1950.

"A Method of Evaluating Protective Colloids for Vat Dyeing" by Paul Wengraf; from *Textil Rundschau;* published in *Am Dyestuff Reptr* of July 10, 1950.

TRANSLATIONS FROM THE ITALIAN

"Static Electricity and Antistatic Agents" by Dr Trinchieri from *Tinctoria.*

"A Review of Several Methods of Hydrosulfite Analysis with Special Regard to Control of Vat Dyebaths"—(A Airoldi and F Marchi, *Tinctoria 51,* No. 2, 43-9 (1954).

Other Journals

"The Functions of Oil in the Sizing of Rayon Warps," Rayon Warp Sizing Specialist.

"Sodium Sulfoxylateformaldehyde" *Colourage III,* No. 2, p34, (1956).

"Textile Finishing—Ancient & Modern," published in "Spot-lite," the publication of the National Institute of Cleaners and Dyers Alumni Society, February, 1949.

"Quality Stripping—A Way to Lower Blend Costs," published in the *Royce Reporter* 6, No. 2—Nov 1950.

"To Desize or Not to Desize, That's the Question" *Daily News Record* of October 14, 1954.

"Le point de vue americain sur le developpement des detergents synthetiques dans les industries diverses" *Bulletin Mensuel de l'Institut Technique d'Etudes et de Recherches des Corps Gras* 3, No. 7, p31, 1949 (Paris).

"Teinture a haute temperature a l'aide de colorants de cuve et avec du sulfoxylate de sodium en lieu et place d'hydrosulfite," *Proceedings of the 27th International Congress of Industrial Chemistry,* Brussels, 11-20 September, 1954.

"Sodium sulfoxylateformaldehyde." *Textile Age 21,* No. 6 (1957).

"In the Field of Wet Finishing": a monthly column published for the last three years in *Textile Age* (1955-56-57).

"Oil in Warp Sizing" *Cotton* (now *Textile Industries*) *106,* No. 4, 92 (1942).

The National Headquarters Office
of the Association
Will Accept Until Further Notice
PREPAID IN FULL SUBSCRIPTIONS
for
THE SECOND EDITION
of
THE COLOUR INDEX
IN FOUR VOLUMES
published by
The Society of Dyers and Colourists
and
The American Association of Textile Chemists
and Colorists
at
$112.00 The Set Delivered

Volumes 1 and 2 now available for delivery on prepaid orders.

Volumes 3 and 4 in process of publication. Shipment will be made volume by volume as ready.

BEING A LIMITED EDITION THE PROMPT PLACEMENT OF ORDERS THEREFOR IS SUGGESTED. WRITE TO:

American Association of Textile Chemists and Colorists
Box 28, Lowell, Massachusetts

The following notice is being mailed to all manufacturers of textile chemical specialties in the U.S.:

IMPORTANT NOTICE

TO all manufacturers of Textile Chemical Specialties:

The American Association of Textile Chemists and Colorists is now collecting material for the 1958 Edition of the Technical Manual and Year Book, and solicits your cooperation.

Please note that the list of Textile Chemical Specialties will be completely revised and brought up to date as in past years. All manufacturers and importers of textile chemical specialty products are therefore invited to submit data for 1958 Edition, covering the following items only:

New Products and data not previously listed
Correction of errors
Deletion of obsolete products

Cards should be filled out strictly in accordance with the directions accompanying this notice, and following the style of presentation employed in earlier Editions. To meet editorial schedules, all cards must be received by the undersigned before December 15, 1957.

WILLIAM H. CADY, Editor, Technical Manual and Year Book
127 Power Street, Providence 6, Rhode Island

DIRECTIONS FOR FILLING OUT CARDS

In the compilation of this list of American sources of textile chemical specialties, products are selected primarily for their specific usefulness in textile processing, with the idea of presenting such information for the benefit of the textile chemist and colorist. However, because some textile chemicals, such as surface-active agents, are employed in other industries, nontextile uses are permitted to be indicated.

The reader should bear in mind that information from firms concerning uses and compositions is repeated without investigation and thus cannot be vouched for by the AATCC. On the other hand, because listings are made without charge for the benefit of our membership, we reserve the right to edit carefully all data received, and especially to revise the list of "various uses" where necessary to conserve space.

Information for new products should be tabulated on cards as described on the reverse of this sheet. Where it is desired to make corrections in old entries in either the Index or the Alphabetical List, or to make deletions of old entries for withdrawn products from both of these, new cards should be prepared in the same manner, appropriately marked for correction or deletion, as described in the directions. Do not prepare cards for products already properly indexed and listed. Please note that we do not furnish printed forms; ordinary white ruled 3" x 5" index cards should be used.

Full instructions for preparing the cards are given on the opposite side of this sheet and examples of cards properly filled out are shown. In making out the cards it is necessary that you follow the instructions carefully; otherwise they may be returned for improvement. In particular, please avoid the use of capitals except for necessary initial letters; be sure to report all products which have been discontinued; and please see that the "Chemical Nature" is properly recorded. We do not ask you to reveal secret information, but such descriptions as "amine compound" or "organic salt" are not considered adequate.

I. KEY

ABCDE

ABCDE Chemical Co.

24 South Main St.

Deer River, Conn.

(a) On first line: firm abbreviation, limited to not over five letters.

(b) On third line: firm name

(c) On fourth and fifth lines: firm address

NOTE: Only one Key Card is necessary from each manufacturer

II. INDEX

Bleaching Agents

Ableachor ABCDE

New index Entry

(a) On first line: enter one of the headings taken from the Index in previous editions, indicating an important use for the product being reported. If it has several uses, make out a separate card for each.

(b) On third line, toward left: list the name of the product (only one) without any descriptive letters or numbers.

(c) On third line, near right margin: list the abbreviation of the firm name, taken from the Key.

(d) On bottom line: indicate whether the card is a New, Corrected, or Deleted Index Entry.

III. ALPHABETICAL LIST

ABCDE

Ableachor* CWS

Bleaching of all fibers

H_2O_2

New List Entry

(a) On first line: abbreviation of firm name.

(b) On third line: complete proprietary name of product, with descriptive letters or numbers; if name of product is a registered trade-mark, indicate the fact by an asterisk following the registered part of the name.

(c) On fifth line: various uses, limited to 20 words.

(d) On eight line: chemical nature, adequately given.

(e) On tenth line: patent number, if product is patented.

(f) On bottom line: indicate whether the card is a New, Corrected, or Deleted List Entry.

AATCC Calendar

COUNCIL
Nov 14 (Lowell Technological Institute, Lowell, Mass); Jan 24 (New York, NY); May 23 (Philadelphia, Pa); Sept 19, 1958 (Piedmont area)

NATIONAL CONVENTIONS
Nov 14-16, 1957 (Hotel Statler, Boston); Oct 30-Nov 1, 1958 (Hotel Conrad Hilton, Chicago); 1959 (Sheraton Park and Shoreham Hotels, Washington, DC); Oct 6-8, 1960 (Sheraton Hotel, Philadelphia, Pa); September 28-30, 1961 (Buffalo, NY)

DELAWARE VALLEY SECTION
Dec 6 (Kugler's Restaurant, Philadelphia, Pa)

HUDSON-MOHAWK SECTION
Nov 22 (Johnstown, NY area); Jan 24 (Albany, NY); Mar 28 (Johnstown, NY area); May 16 (Ladies Night); June 20 (Summer outing)

MID-WEST SECTION
Feb 15 (Hotel Bismarck, Chicago, Ill); April 19 (Netherland Hilton Hotel, Cincinnati, O); June 13-14 (Outing—Browns Lake Resort, Burlington, Wis)

NEW YORK SECTION
Dec 6, Feb 7 (New York, NY); April 11 (New Jersey area)

NIAGARA FRONTIER SECTION
Dec 6, Feb 21 (Buffalo); Apr 4 (Joint meeting)

NORTHERN NEW ENGLAND SECTION
Dec 6 (Annual meeting, Hotel Continental, Cambridge, Mass)

RHODE ISLAND SECTION
Dec 5 (Annual Meeting—Johnson's Hummocks Grill, Providence, RI)

SOUTHEASTERN SECTION
Dec 7 (Atlanta Biltmore Hotel, Atlanta, Ga)

WESTERN NEW ENGLAND SECTION
Dec 13 (Rapp's Restaurant, Shelton, Conn)

ELECTED TO MEMBERSHIP

October 3, 1957

SENIOR

William E Driscoll
Paul B Dry
Robert F Lachance
Ralph D Morrison
Maurice W San Souci

JUNIOR

Wendell Borne
William B Luce, Jr
Troy B Terry
Bob A Worley

Employment Register

This column is open for two insertions per year, per member, without charge. Blanks can be obtained from, and filed with, the secretary of the Association, Post Office Box 28, Lowell, Mass. It is understood that these will be open to inspection by prospective employers who can obtain further information from the secretary.

57-14

Education: BS, chemistry, Lowell Tech Inst; management courses at New York Univ Graduate School of Business Administration.
Experience: Approx 2 years textile chemistry and research chemist in dyestuff manufacture.
Age: 25; single; veteran.
Position desired: chemical sales or management trainee.
Location desired: New York-New Jersey metropolitan area.

11-4, 11-18

57-15

Education: BS & MS, chemistry, Lowell Tech Inst.
Experience: 6 years textile technician, textile chemist and fabric development.
Age: 28; married; references.
Position desired: fabric development.
Location desired: Metropolitan New York.

11-4, 11-18

57-16

Education: BS, chemical engineering, New York Univ; diploma, chemistry and dyeing, Philadelphia Textile Institute.
Experience: Approx 20 years dyer, printer, chemist—management.
Age: 47; married; veteran; references.
Position desired: print colorist, dyer, executive, administrative, sales.

11-4, 11-18

57-17

Education: textile engineering & chemistry, Hogere Textile School, Tilburg; Business Administration School, Berlitz School of Languages.
Experience: Approx 10 years dyer-finisher; laboratory; chemical sales.
Age: 38; married; references.
Position desired: sales; sales development of intermediates; fibers, textile chemicals or dyestuffs.
Location desired: South or Southeast. New York-New Jersey or California acceptable.

11-4, 11-18

PIEDMONT SECTION OFFICERS FOR 1958—Front row (l to r): E A Murray, councilor; L C Reynolds, secretary; J C King, vice chairman; W E Rixon, chairman; A R Thompson, custodian; V B Wright, Jr, treasurer; J S Beattie, councilor. Back row (l to r): M L Slesinger, sectional committeeman; J V Killheffer, councilor; R E Rettew, sectional committeeman; A H Gaede, councilor; P B Stam, councilor; F Fortess, chairman, Research Committee; D A Torrence, Jr, sectional committeeman; Clarence Hooper, councilor; E P Henley, social chairman.

• NEW PRODUCTS AND DEVELOPMENTS •

Turbostat High-Temperature Dyeing and Bleaching Machine

Obermaier & Cie, Neustadt, Germany, celebrating its 75th year in the manufacture of dyeing and bleaching machinery, recently presented its new, high-temperature dyeing and bleaching machine, the Turbostat, at the Hannover Industrial Fair.

The unit, designed "to give the industry a modern, rational high-temperature bleaching unit for all types of fibers in every form under and above 212°F," is fitted with a special drive, which is said to embody a number of important advantages and modifications. Construction is simple, and the unit is said to be easy to handle.

In comparison with a centrifugal pump and other known systems, the power consumption of the Turbostat is said to be much smaller, with increased efficiency, due to the elimination of all valves for control. A smooth running of the liquor and an even dispersal of the dyebath is said to be guaranteed by the central introduction of the liquor into the vessel in both directions over the heating and cooling coils. The change of liquor circulation from inside-outside and outside-inside is obtained by reversing the motor, which is controlled by an electro-automatic device. Owing to the elimination of the stuffing box in the drive and in the additional pump, it is claimed that there is no liquor leakage. Also, since no packing is required, attention is reduced to a minimum. The enclosed drive reportedly eliminates the oil leakage as well as the penetration of overflow water, ensuring little wear of the motor shafts. The drive is said to work best at higher temperatures. Due to the machine's open construction, it is stated, there is no stoppage of the pump wheel, which might otherwise happen when wet treatment is applied to finest loose material.

The closed expansion tank, which is sometimes used for various operations, has been replaced by an open feeding tank in the Turbostat. A certain amount of liquor flows continuously over a back cooling unit into the feeding tank under the level of the dye liquor. This is controlled by a valve, which is adjusted to an exact working pressure to ensure The static pressure can be obtained by means of the additional pump. Assistance from air, gas or steam is not required to produce the static pressure, it is claimed. By means of a further piping, it is possible to make additions at all stages of the dyeing or bleaching process through a device in the feeding tank after a small valve is opened. These additions are pressed into the mixing chamber of the drive by means of the above-mentioned additional pump. Actually, the number of valves is reduced to a minimum, thus facilitating all operations.

The cover, designed for rapid opening and closing, is equipped with a safety device. By means of a coupling piping, which requires no further propeller, it is said to be possible to couple the Turbostat with another apparatus of the same size. In addition to dyeing in both directions, the following reportedly can be effected with the Turbostat without complicating its handling: pumping the liquor high in the reservoir, sucking off by vacuum, steaming, and continuous rinsing.

Detailed view of the Turbostat

The Turbostat in operation

OBITUARY

FREDERICK C SCHOLLER

FREDERICK C SCHOLLER, 71, founder and board chairman of Scholler Brothers, Inc, Philadelphia, died Saturday, October 5, after a prolonged illness.

Funeral services for Mr Scholler, whose home was at Ventnor, NJ, were held in Philadelphia on October 10th. The number of people attending gave evidence of the high esteem in which Mr Scholler, the son of immigrant parents, was held. Burial was private.

Soon after his graduation from Philadelphia Central High School in 1905, he launched his career in textile chemistry. He and his brothers Adolph and Henry Herbert founded "Scholler Brothers Co" in 1907. With the steady expansion of the business, the company became a corporation in July, 1914. In 1927, Scholler Brothers, Ltd was established at St Catherines, Ontario. In 1936, Trisco Products, Inc, was formed as a sales company for Scholler Brothers, Inc. Fred Scholler was president of all companies until 1954, when he became chairman of the board of the American and Canadian companies. He retained the presidency of Trisco Products Co, Inc. Lloyd Koons is president of Scholler Brothers, Inc.

Mr Scholler's activities in the fields of business, fraternal, education, philanthropic and civic interests were varied and extensive. In 1939, he and his brothers established the Scholler Foundation, which is devoted to charitable activities.

For many years, Mr Scholler was president of the Philadelphia Textile Institute Foundation, and in 1956, became president emeritus.

He received an honorary degree of Doctor of Science from La Salle College in 1949, and a degree of Doctor of Textiles was conferred upon him by Philadelphia Textile Institute in 1955.

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Abstracts

(*Concluded from page 792*)

The application of these dyes in piece dyeing is described by the author. In general, it involves padding, drying, fixation by heat-treatment and removal of unfixed dye.

In printing, the dyes are mixed with urea, alginate or other thickening, and alkali. Printing is followed by steaming for 5 minutes in a rapid ager.

The Cibacron dyes may be stripped from the fiber, if necessary, by several methods which are described. Several brands may also be discharged.

A table of fastness of the individual dyes to light, washing, chlorine, etc, is included.—WHC

Developments in Phthalocyanines for Textiles

Bowker, E E, *Dyer* 117, 355-60, March 1, 1957

The use and development of phthalocyanines for textiles can be divided into three phases: 1) the utilization of the pigments themselves; 2) modification of the phthalocyanine to give it affinity for the fiber; 3) production or synthesis of the phthalocyanine itself in the fiber.

One extensive use made of the phthalocyanines as pigments is in the coloration in the mass of certain rayons. Regenerated cellulose, cuprammonium rayon and cellulose acetate have been "spun-dyed," using these pigments.

Another extensive use of the phthalocyanine pigments is in the rapidly expanding field of dyeing and printing with resin-bonded pigments.

The first satisfactory modification of phthalocyanine to yield a dye with affinity for the fiber was the production of a direct dye by the sulfonation of the copper phthalocyanine. This dye has a rather poor affinity for cellulose, requiring a good deal of "salting-on." The fastness to light is excellent, but the wetfastness is poor.

Phthalocyanines have been produced containing thiocyano and other groups which, when reduced with sulfide, dye like sulfur dyes.

When quaternary salts of copper tetra-4-pyridyl phthalocyanine are prepared with dimethyl sulfate, these compounds are soluble in water, have affinity for cellulose, particularly under alkaline conditions, and the dyeings are fast to light. The pyridinium groups obviously act as a temporary solubilizing mechanism, initially giving solubility, and later, during the alkaline treatment, being changed so as to lose this function. The Alcian dyes are based on this principle. Their chemistry and application are described at some length.

A phthalocyanine dye using cobalt as the central metal atom has been produced. This can be reduced to a soluble form and dyed like a vat dye.

Another new development is a derivative of phthalocyanine with the characteristics of a basic dye, suitable for acetate and acrylic fibers. Also two chrome-developed dyes have been produced. The constitutions of these new products have not yet been disclosed.

Finally, a process for the production or synthesis of the phthalocyanine in the fiber is described in great detail.—WHC

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